Fortress



Japanese Castles 1540-1640

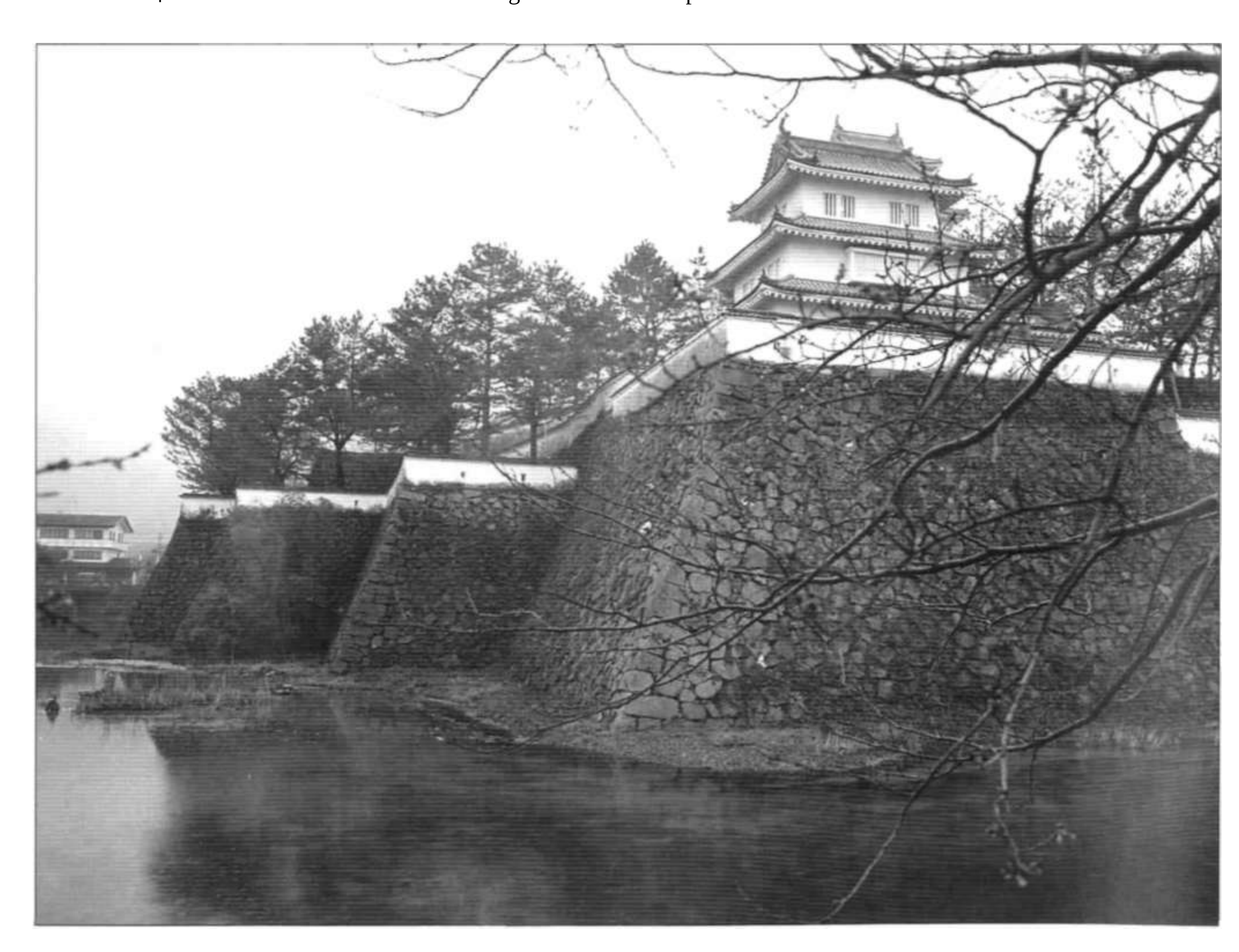
Stephen Turnbull • Illustrated by Peter Dennis

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Introduction

Japanese castles as we see them today are not only final products of a long process of military evolution, but also evidence of a military revolution. In the latter half of the 16th century Japanese warfare was transformed. It changed from an activity characterised by the use of loosely organised troops wielding bows and arrows and defending largely wooden fortifications, to one that involved well-disciplined infantry units armed with guns, fighting from castles of stone. The similarities to the military revolution that was taking place in Europe at the same time are striking, but until the beginning of this period there had been no cultural contact between Japan and Europe.

Contact was made when a Portuguese ship was wrecked on the Japanese coast in 1543, and the two cultures soon began to realise how their widely separated worlds had been evolving in roughly similar ways. Both were experiencing warfare on a larger scale than ever before, which required the development of strong internal army organisation and good discipline, and both were seeing a move towards a preference for fighting on foot. Yet there were also some fascinating differences, at the same time that the European knight was giving up his lance for the pistol, the mounted samurai was abandoning his bow for a spear.



The castle of Shimabara in Kyushu, a fine example of the classic style of developed Japanese castle architecture, involving the elements of a moat, the all-important huge stone bases, which are the hallmarks of a Japanese castle, and the graceful superstructure. We see here one of the corner towers, and the long white small walls pierced with gun and arrow loops.

However, it is in the field of castles and fortifications that both similarities and differences are found in the greatest abundance. Italian visitors to Oda Nobunaga's castle of Azuchi in 1579 compared it favourably with any contemporary European fortress, and remarked particularly on the richness of the decorations and the strength of the stone walls. As none of these early visitors were military men, rather merchants or priests, they cannot be expected to have commented upon Japanese castles from a position of technical knowledge, but it is abundantly clear from the impression given to them by the walls of Azuchi, Osaka and Edo, all of which were enthusiastically described in contemporary Jesuit writings, that they were making comparisons with existing structures in Spain or Italy.

So what were they actually comparing the Japanese castles to? By the mid-16th century the huge sloping stone walls that surrounded Verona, Sienna or Rome had become a recognised and vital part of the townscape of a successful city. They were the defining features of the *trace italienne,* the fortification style characterised by the use of the angle bastion, which was designed for artillery warfare and was the most important architectural innovation since the arch. The walls of fortresses such as Osaka certainly had much in common with the European system, but what the visitors did not know was that these curiously similar structures had a completely different developmental history, were built in a completely different way, and were designed to withstand attacks of a completely different nature.

The pages that follow will offer a detailed discussion on these points, all of which went towards making the Japanese castle into a unique form of defensive architecture that acknowledged its own culture and tradition, yet responded imaginatively to changing conditions of warfare. Like those in contemporary Europe, Japanese castles experienced conflict on a huge scale when all the theory behind them was tested to destruction in half a century of fierce civil war.

Japanese castles in their historical context

By the time that the first stone walls began to appear around Japanese castles, an innovation that can be seen from about 1550 onwards, Japan had already experienced intermittent bouts of civil war for almost 1,000 years. The key to understanding the reasons for such conflicts, and the nature of the Japanese castles that arose in response to them, involves an appreciation of Japan's physical isolation from continental Asia. This protected her from some dangers, so that while China and Korea were being ravaged by the Mongol hordes in the 13th century, life was comparatively peaceful in Japan. Attempts to invade Japan were repulsed in 1274 and 1281, but this splendid isolation also meant that Japan could not expand into her neighbours' territories to acquire more cultivable land, something that Japan was desperately short of. As the struggle for land grew, the possession of military force was the best guarantor of securing new lands and of then defending them against rapacious neighbours.

The establishment of the rule of the *shogun* (military dictator) after the triumph of the Minamoto family in the Gempei Wars of 1180-85 provided some measure of stability amid the rivalries, but invading Mongols, rebellious emperors (who resented the purely ceremonial role forced upon their sacred office by the *shogun),* family leaders whose wealth rivalled that of the *shogun,* peasant revolts and fierce religious fanatics all played their part in disrupting the theoretical calm. In 1467 the Onin War, so called from the *nengo* (year period) in which it began, broke out between two rival samurai clans. Kyoto, the Japanese capital, was laid waste and among the smouldering ruins of palaces and temples lay the blackened remains of shogunal prestige. From this time on any centralised authority that was left counted for little against the naked military might of the *daimyo* (great names) as the rival warlords termed

themselves. The next century and a half is known as the *Sengoku Jidai* (The Warring States Period), which lasted until Japan was reunified under the Tokugawa, a process that culminated in the siege of Osaka in 1615.

Some of the sengoku *daimyo* had aristocratic backgrounds; others were the sons of tradesmen. Some acknowledged centuries of military tradition and service to the *shogun,* others learned rapidly how to swell the numbers of their armies by recruiting peasants as ambitious for advancement as they were themselves. Some ruled their territories from graceful mansions set among ancestral rice fields, but the determined ones built castles.

The castles of the early Sengoku Period looked very different from the graceful fortresses of later years. Most were just hastily constructed stockades on the tops of mountains, linked by paths and passes and looking down on vital roads. As time went by the stronger *daimyo* absorbed their weaker enemies and the strength of their fortified bases grew to be seen as a vital element in this process. So single stockades became fortified complexes of wooden stockades that were combined across sculpted hillsides. Then stone was added, and stout gatehouses, towers and keeps began to arise. At the same time the unexpected contact with Europe introduced firearms to Japan, so instead of seeing only ranks of archers, battlefields began to witness ranks of arquebusiers. The samurai, who had traditionally been a mounted archer, had already adopted the spear to allow him to take the fight to dismounted missile troops. Now he began to dismount from his horse to fight beside the *ashigaru,* the lower-class foot soldiers, in a coordinated battle plan. This was the military context that saw the birth of the classic form of the Japanese castle, a style that combined beauty with strength, and was to play a vital role in Japanese history.

Chronology

1184	Fortress of Ichinotani is captured
	Last recorded use of crossbows in a siege in Japan
	Kusunoki Masashige defends *yamashiro* of Akasaka
1333	Siege of *yamashiro* of Chihaya
1467	Onin War begins
1477	Onin War officially ends
1494	Hojo capture Odawara
1542	Siege of Toda
1543	Arrival of Europeans in Japan
1545	Night battle of Kawagoe
1549	Arquebuses used at Kajiki siege
1553	First battle of Kawanakajima
1554	Siege of Muraki - volleys of arquebuses used
1557	First siege of Moji
	Capture of Inabayama (Gifu)
	First tower keep at Tamon
1571	Destruction of Mount Hiei by Nobunaga
1573	Death of Takeda Shingen
1574	Siege of Nagashima
1575	Siege and battle of Nagashino
1576	Building of Azuchi castle
	Siege of river complex of Ishiyama Honganji
	Building of Maruoka castle
1578	Death of Uesugi Kenshin
1579	Siege of Miki
1580	Surrender of Ishiyama Honganji
1581	Siege of Tottori by starvation
1582	Murder of Oda Nobunaga
1584	Battles of Komaki and Nagakute - earthworks used
1586	Building of Osaka castle
1587	Invasion of Kyushu; Sword Hunt
1590	Final siege of Odawara
1591	Siege of Kunoe - unification of Japan completed
1592	First invasion of Korea
1593	Japanese withdraw from Korea
1597	Second invasion of Korea
1598	Death of Toyotomi Hideyoshi
	Korean War ends
1600	Battle of Sekigahara
1603	Tokugawa Ieyasu becomes *shogun*
1614	Winter Campaign of Osaka
1615	Summer Campaign of Osaka
1616	Death of Tokugawa Ieyasu

Design and development of the Japanese castle

The first Japanese castles

The nature of the first Japanese castles illustrates another factor that arose from Japan's isolation from continental Asia - the development of a very different tradition of defensive architecture from that of China and Korea. The biggest variation lay in the almost total absence from Japan of the walled town, which was where the wealth of Ancient China was concentrated.

With no barbarian hordes to fear on their islands, the threat to Japan came mainly from internal rebels, who tended to establish themselves in purely military strongpoints. As the Japanese landscape is predominantly wooded and mountainous, it is not surprising to find these two factors combined in the design of most of Japan's earliest fortresses. A multitude of hilltop sites provided both the defensive topography and the building materials that were needed to strengthen their natural positions. The result was the development of a style of castle known as the *yamashiro* (mountain castle), which was to continue being built in remote areas long after the introduction of stone castles, due to reasons of convenience and availability.

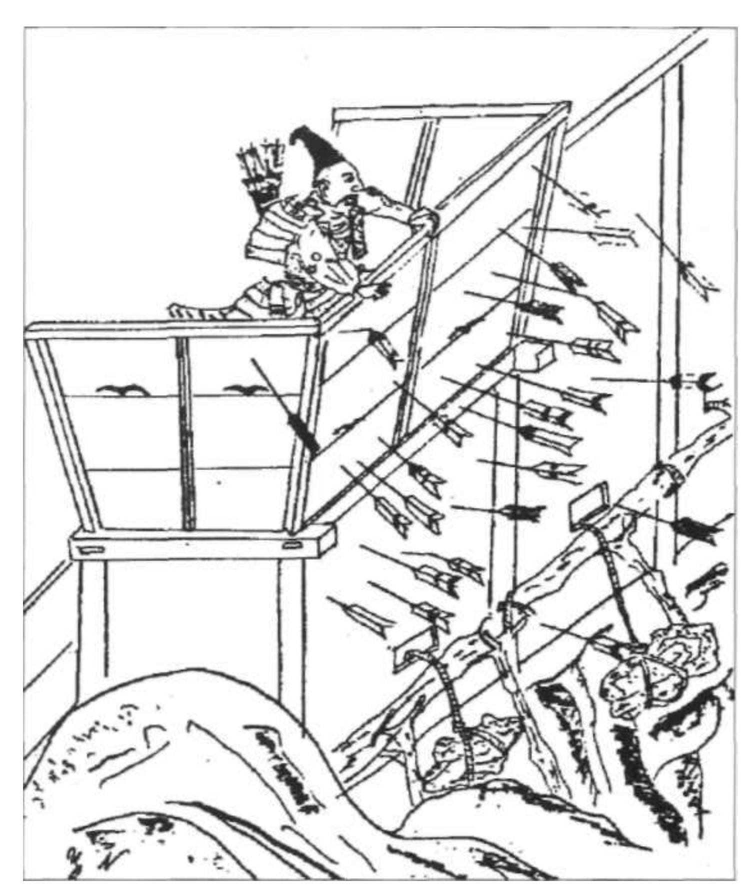
For the earliest *yamashiro* (and for simple fortresses right throughout the period) little was done to alter the overall shape of the existing mountain or hill other than stripping the summit of enough tree cover to provide building materials and to allow good fields of view and arcs of fire. The slopes of the steeply sided hill or ridge would be allowed to retain their forested cover to prevent soil erosion and to provide another defensive barrier. Firm footpaths would be constructed linking different peaks together, thus producing a *yamashiro* complex that consisted simply of a number of stockaded hilltops joined to each other.

There are several illustrations of *yamashiro* castles in the picture scrolls of campaigns and battles fought during the Later Heian Period, from about AD 950 onwards. In all cases the landscape has been used intelligently

The moat and part of the walls of the mighty Osaka castle, built by Toyotomi Hideyoshi in 1586. This image shows the interesting contrast between the seemingly haphazard arrangement of stones in the main sections of the walls and the neat dovetailing of fully dressed stones where the walls intersect to form exterior corners.



and economically. This leads to numerous variations of *yamashiro* depending on location, with great differences between those located in mountainous areas and those built in flatlands surrounded by rivers and flooded rice fields, where the castle would be referred to as a *hirajiro* (plain castle). A mixture of the two styles was known as *hirayamajiro* (a castle on mountain and plain). On the excavated hilltops there would be built quite intricate arrangements of wooden palisades, decorated wooden towers, gateways and domestic buildings. The solid wooden walls of the palisades were pierced with arrow slits, and in some cases rocks were slung by ropes through holes. In the event of an attack the rope would be cut, allowing the rocks to fall against an enemy. Towers were enclosed at the top with wooden walls or portable wooden shields, and from these vantage points archers fired longbows and crossbows, or simply threw down stones, the only other missile weapons available. Domestic buildings thatched with rice straw would also be built from wood, and acted as quarters for the garrison, reception and command areas for the general, as well as stables and stores.



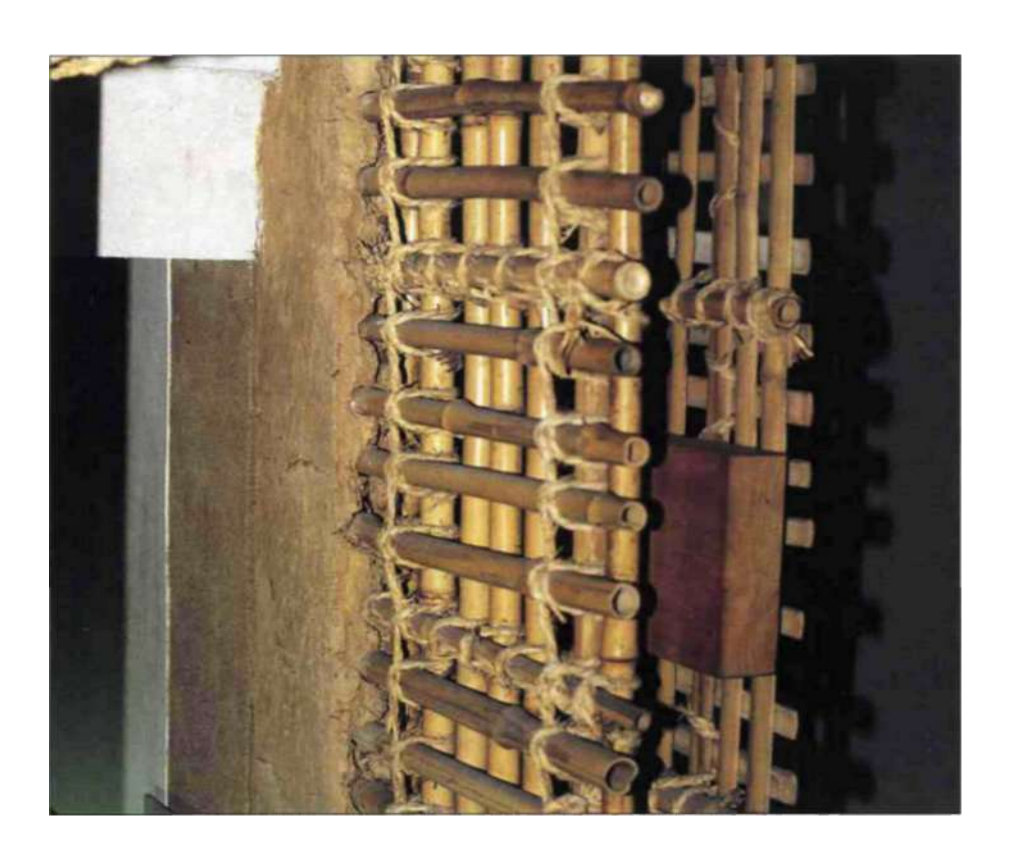
A detail from the picture scroll of the Gosannen War, showing the wooden tower of a *yamashiro* that has been attacked by arrows. Rocks ready for dropping hang by ropes through holes in the tower.

The main defensive purpose of the *yamashiro* was to restrict a hostile forces access to an area, and also to keep his forces under surveillance. Communication between the hilltop redoubts was vital so that troops could be moved along the mountain paths from one sector to another as required. Also, if a lower section of the *yamashiro* complex was lost, then the overall design was supposed to permit the garrison to launch a counterattack with ease, or at the very least isolate the now hostile portion of the castle. With no stout walls like those round Chinese cities to batter down, the Japanese had no need of siege catapults, for which quite a science existed in China. Instead any siege machines used, such as large crossbows, tended to be employed in an anti-personnel role prior to an infantry assault. Thus we read of the use of *oyumi* (crossbows) in northern Japan that the arrows 'fell like rain', killing hundreds of samurai and causing fires, but not that they broke down any walls. This was the style of Japanese castle that played such a vital role in the Gempei Wars of 1180-85.

The *sengoku yamashiro*

The above description of a fairly rudimentary wooden fortress on top of a hill continued to apply for many years, and a *daimyo's* smaller outposts during the Sengoku Period would have resembled it almost exactly. But as time went by many changes occurred. The first was a more creative use of the natural slopes afforded by the wooded hillsides: the forest cover was stripped away almost entirely and the gaps between adjacent ridges were further excavated to make ditches. In such a way a roughly concentric series of mountain peaks could be converted into a number of natural inner and outer baileys, each overlooking the one below it, utilising not only the tops of the hills but different intermediate levels also. As this technique developed, the tops of successive baileys were levelled or even enhanced to create interlocking fields of fire by shaping the mountainside. The result was a series of sculpted earth bastions reminiscent of the 'Old Dutch' developed in the Netherlands at roughly the

RIGHT This exhibit within the Uto tower of Kumamoto castle shows how the plastered walls of a castle keep were constructed on a type of wattle and daub arrangement. Bamboo poles were placed over a stout beam and lashed together both vertically and horizontally. A layer of plaster, which was remarkably fireproof, was applied to the surface, and painted white. A similar, but cruder method was used for the small walls that appear on the tops of the stone bases of a castle.

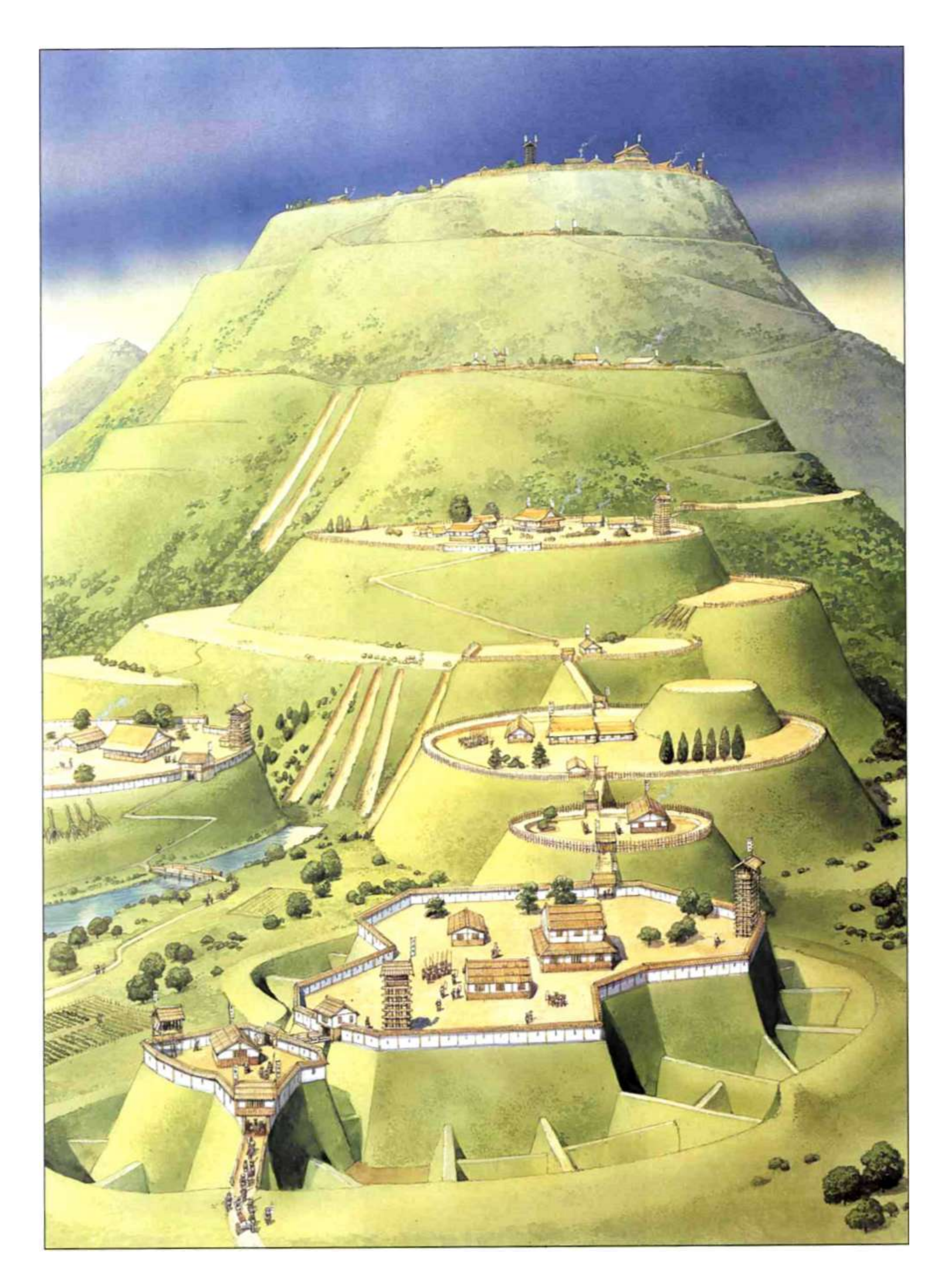


BELOW The interior of a section of small wall at Kakegawa castle. The triangular gun ports and the rectangular arrow ports can be seen, as well as the wooden supports inside the walls, over which planks could be laid to create firing platforms, and the tiles that gave protection from the weather.



OPPOSITE **Shikizan castle, 1550**

This plate shows Shikizan castle, which was owned by Matsunaga Hisahide. He died here following the siege by Oda Nobunaga in 1577, after which the site was abandoned. Shikizan shows the culmination of the *sengoku yamashiro* style common before the widespread use of stone-clad bases. A roughly concentric series of mountain peaks has been converted into a number of natural inner and outer baileys by carving up the mountain. Each layer overlooks the one below it, utilising not only the tops of the hills but different intermediate levels also to create interlocking fields of fire. The result is a series of sculpted earth bastions. Ditches have been strengthened by having vertical cross pieces built through them at right angles to the inner walls, and near perpendicular sections are made more dramatic by having long channels cut out of them, down which rocks could be rolled. Mountain streams have been diverted into gullies to create moats, and entrances to gateways are offset to allow an enemy's approach to be covered completely. Walls have been built using a form of wattle and daub construction plastered with a mixture of red clay and crushed rock. Arrow ports were cut at regular intervals. Outbuildings and towers are simple structures.



same time, but with two important differences. Firstly, the Dutch fortifications were built on flat and low-lying surfaces and, secondly, they were created by adding to the landscape rather than removing considerable sections of it. Some ingenious sculpted forms were created in Japan. Ditches were strengthened by having vertical cross pieces built through them at right angles to the inner walls. Near perpendicular sections were made more dramatic by having long channels cut out of them, down which rocks could be rolled. Mountain streams were diverted into gullies to create moats, and entrances to gateways were offset to allow an enemy's approach to be covered completely.

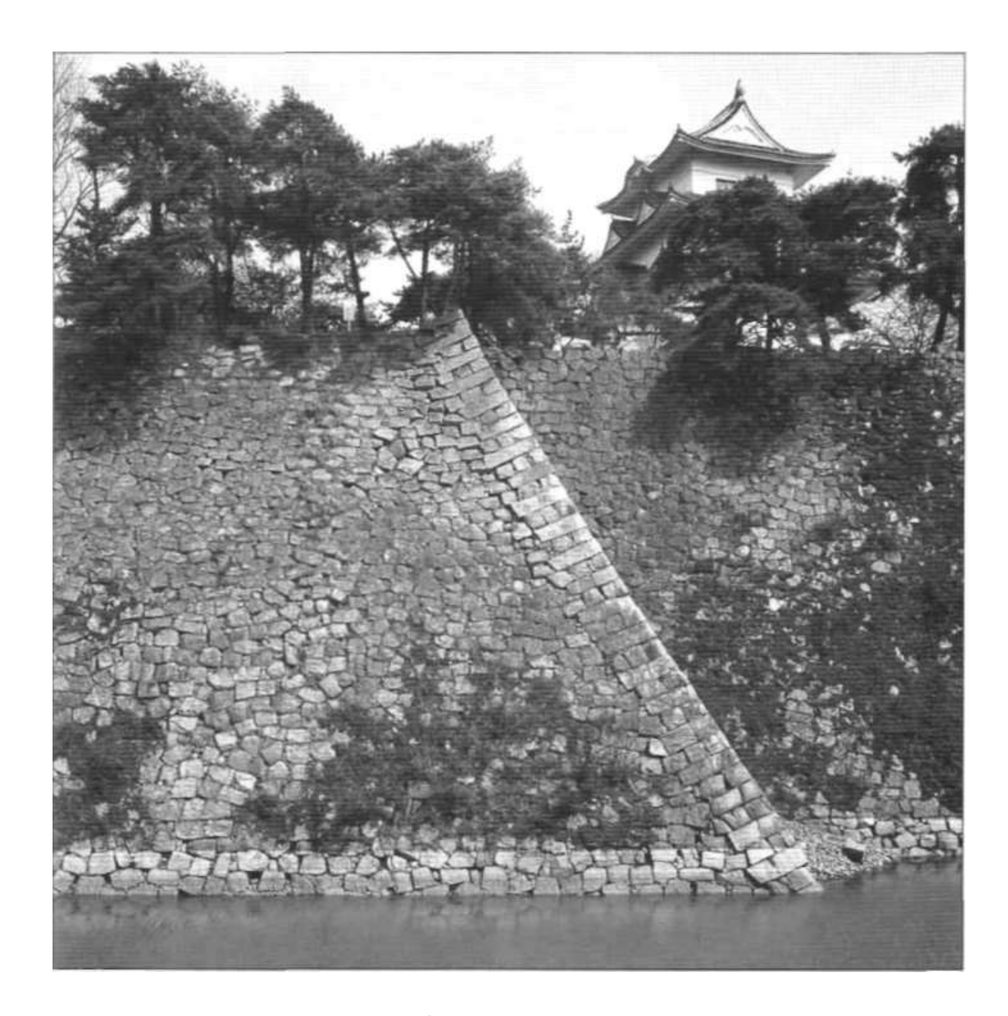
At the same time more elaborate walls and buildings were raised, and in place of the loose wooden palisades of the old days more substantial surrounding walls were built using a form of wattle and daub construction. Stout vertical wooden posts were driven into the earth at six-foot intervals with bamboo poles placed between them and bundles of bamboo, lashed together with rope, as the core. The resulting structures were plastered with a mixture of red clay and crushed rock, and were often whitewashed, giving a Japanese castle its characteristic appearance. Arrow ports were cut at regular intervals. To keep weather damage to a minimum the walls were topped with sloping thatch, wooden shingles, or even tiles. In many cases the walls were supported on the inside by a series of horizontal and vertical timbers, and at times of attack planks were laid across them to provide platforms from which guns or bows could be fired over the walls. Similar platforms could also be fitted to gates.

The introduction of stone

The great weakness of the *sengoku yamashiro* model was the inherent instability of the natural foundations created from a sculpted hillside, particularly where the forest cover had been removed. Three storeys was the absolute maximum that could be risked for an enclosed tower with rooms, and outlook towers tended to be mere skeletal structures. To bind the soil on exposed sections grass was allowed to grow, but the torrential rain of Japan took a heavy toll of foundations and structures alike. Even if there were no typhoons, earthquakes or sieges to create additional havoc, normal wear and tear demanded that the plastered walls be routinely repaired at least every five years. If stronger, and therefore heavier, structures such as keeps and gatehouses were to be added, then something more substantial than a grassy bank was needed as a castle base, and the solution to the problem was to provide the Japanese castle



The particular feature to be noticed here in this reconstructed section of the walls of Shoryuji castle is the grassy bank, which in the later forms of castle was replaced by the massive stone bases. This is a simple corner tower with a stone dropping port and very rudimentary stone reinforcements to the wall.



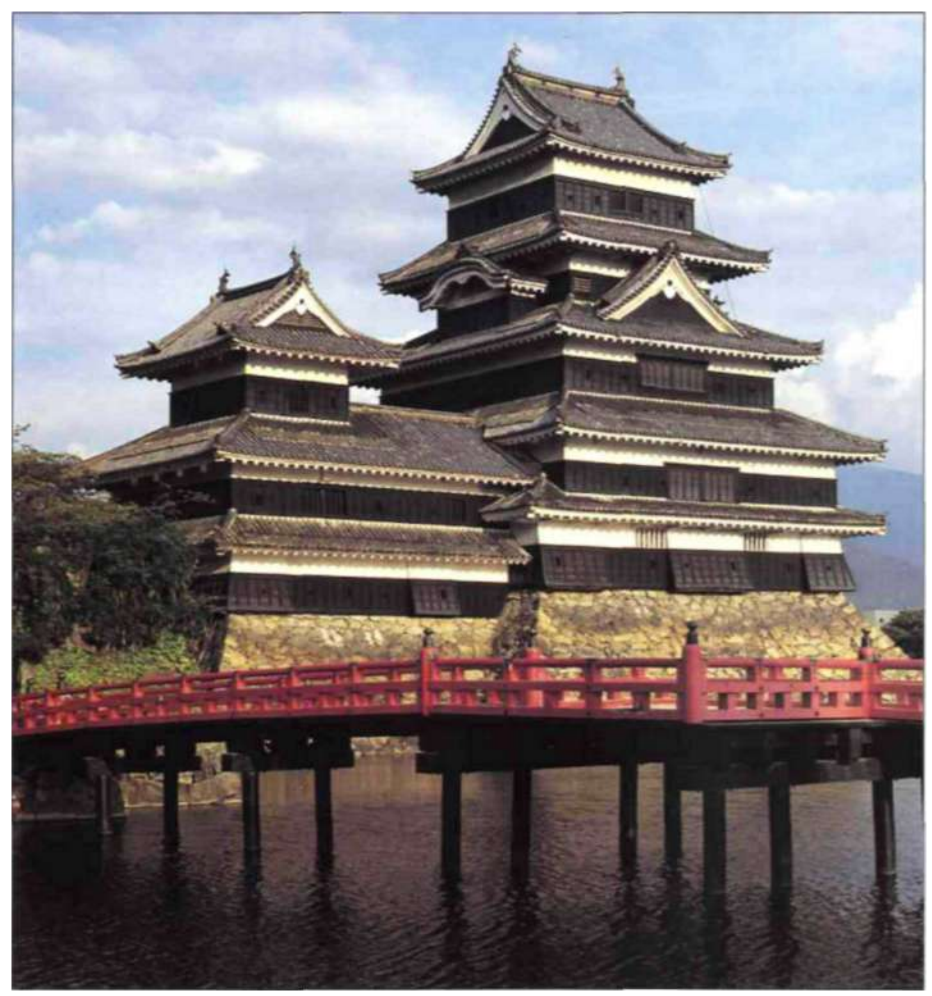
It is the stone base that defines the Japanese castle. This example, from Iga Ueno, shows the dramatic curve of the stone base as it descends into the moat. The keep is just visible above the line of trees that have been planted to shield the interior of the castle from prying eyes.

with its most enduring visual features. These were the great stone bases, a fundamental design element that can be identified in even the most ruined castle site. So strong were these creations that the foundation walls of the castle of Naha in Okinawa was able to withstand a bombardment by the US Navy in 1945!

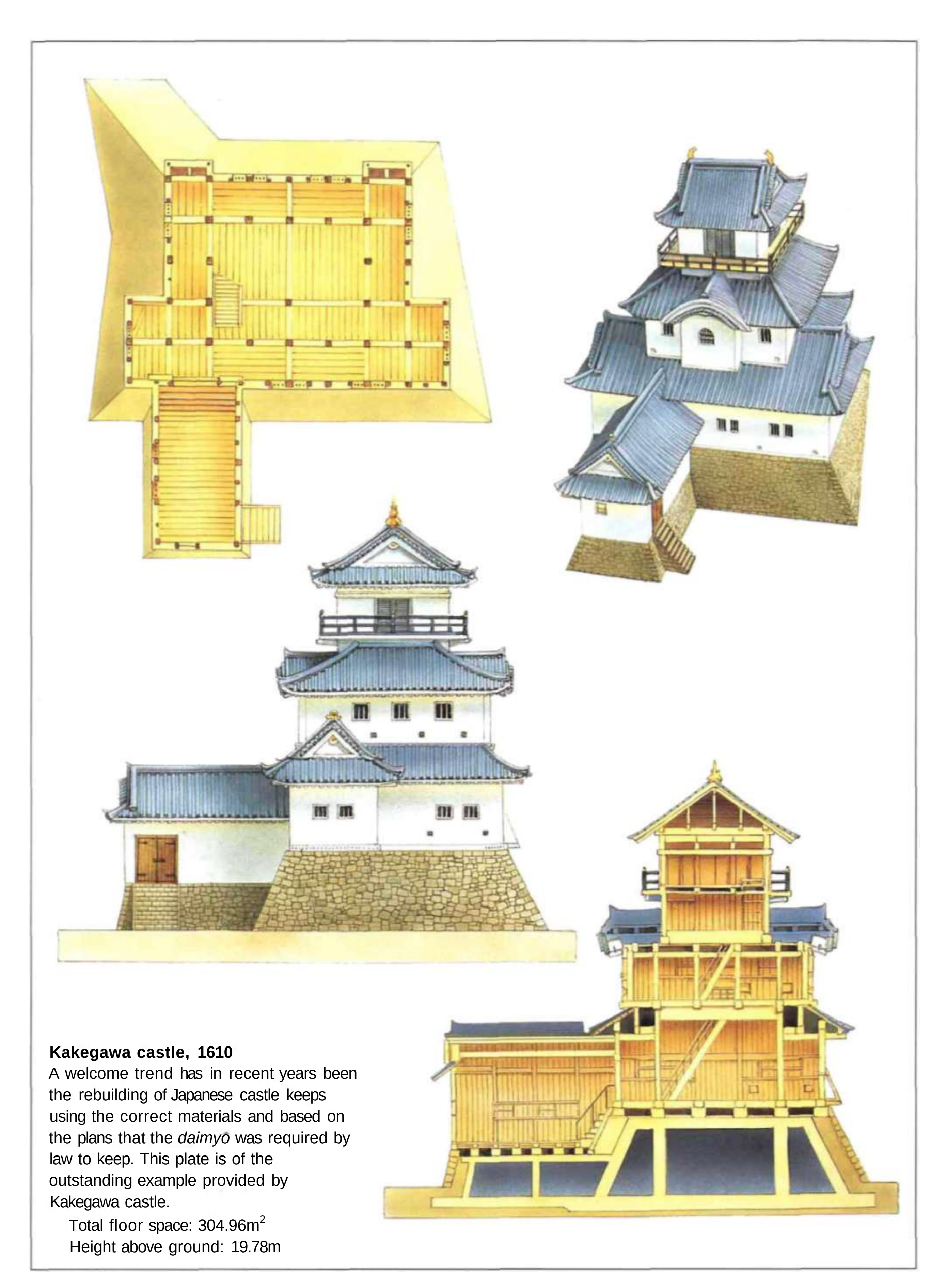
To a large extent it is these stone bases that are the essence of 'Japanese castles' of the Sengoku Period, because many never had elegant tower keeps, such as those at Himeji and Hikone, raised above them, simple wooden buildings and plastered walls were often enough to augment the stone bases. It is also with these stone bases, rather than any superstructure, that comparisons can be made with the European bastions of the *trace italienne.* However, as has already been stated, the evolution of the Japanese form was very different from that of Europe, especially with regard to construction techniques. A European bastion was built from scratch, either completely from stone or from earth (whether the earth was clad in stone or brick revetments or not), while a Japanese one tended to be carved as in the descriptions above and then clad in stone. The result in either case was the same - an immensely thick defensive wall.

It must not, however, be thought that the new style of stone castle immediately supplanted the earlier models. Apart from financial considerations, there was also the added complication that few *daimyo* relied on one castle alone, and instead maintained networks of 'satellite' castles. The central castle in a *daimyo's* territory was called the *honjo* (main castle), which was supported by a number of *shijo* (satellite castles). In some cases these *shijo* would operate independently of the *honjo,* and in the fief of the Hojo family, for example, they were used for administering occupied territories. *Shijo* were invariably commanded by members of the *daimyo's* own family or his most trusted hereditary retainers. Some *shijo* would be miniature versions of the *honjo,*

ABOVE The 'snout' of the corner of the stone base-cum-wall of Hirado castle is shown here. Note the massive stones, the ne *ishi* or root stones, at the foot of the wall.The harbour of Hirado can be seen in the distance, and there are the traditional pine trees planted behind the line of the wall.



RIGHT The striking red bridge of Matsumoto sets off the beauty of the keep that lies behind it. Unlike most castles, which were built on hills, Matsumoto is a *hirajiro,* 'a castle on the plain', except that the immediate plain is beside the wide river that forms its moat. The complex we see today consists of the keep (built in 1597) and an attached northern tower that perfectly balances it. Both in its external appearance and its perfectly preserved interior, Matsumoto is the Japanese equivalent of the Taj Mahal.



Kakegawa castle, 1610

A welcome trend has in recent years been the rebuilding of Japanese castle keeps using the correct materials and based on the plans that the *daimyō* was required by law to keep. This plate is of the outstanding example provided by Kakegawa castle.

Total floor space: 304.96m^2

Height above ground: 19.78m

demonstrating a similar use of stone bases and wooden towers, but related to them would be another network of sub-satellite castles, which would probably be old-style *sengoku yamashiro* with sculpted hillsides and plastered walls, but little else in the way of elaboration. Finally, these sub-satellites would themselves be supported by small stockade fortresses indistinguishable from the time-honoured *yamashiro*. These little castles were not necessarily permanently garrisoned, but weapons would be stored there and part time soldiers would take control on declaration of an emergency situation. The Hojo's Gongenyama castle, for example, had a strength of 252 men, so they were more than just lookout posts. As a result of the satellite system, therefore, even as late as the 1590s, it was possible to see examples from all the different periods of Japanese castle development still in use.

The development of the tower keep

The introduction of stone as a building material not only combated the problem of soil erosion and weather damage, it also allowed castle designers to raise new structures that would previously have been thought impossible, leading to the Japanese castle as we know it today. Stone castle bases sloped dramatically outwards, as did European artillery bastions, but the geometrical reasoning behind them was very different. The horizontal geometry of a European bastion was primarily concerned with discovering the ideal angle for providing covering fire with no blind spots, and its vertical geometry was designed to keep to a minimum the amount of soil that would spill out after bombardment (thus affording a ramp to the enemy), and to provide a sufficient angle to make scaling ladders impossibly long. The Japanese considerations



The keep of Hikone castle, first erected at Otsu in 1575, is one of the finest of the original keeps left in Japan. It has a characteristic stone base, and the windows of its upper storey are finished in *kato mado* style with an external balcony. It was the seat of the Ii family.

were more ones of strength, both to hold back the inner core (which in the case of a stone castle on a flat surface, such as much of Osaka castle, had to be artificially created) and to take the weight of a keep. There was also the constant threat of earthquakes, which occur frequently in Japan, and it was found that long and gently sloping stone walls absorbed earthquake shocks very well.

The foremost exponents of stone base construction were the masons of Anou in Omi Province. They had specialised for centuries in the building of stone bases for temple buildings and pagodas, and their clever use of trigonometry revolutionised Japanese castle design. Through the use of massive shaped stones the base could not only be sloped, but could also be given a curve. This ensured that the stresses could be directed very accurately to give the solid foundation that was sought. The Anou masons appear to have come on to the scene in 1577, by which time several tower keeps had already been experimented with. The *daimyo* Matsunaga Hisahide is credited with the first tower keep at his castle of Tamon in 1567, but nothing of it has survived. Maruoka's keep was built in 1576 and survived almost intact until 1948 when it was levelled by an earthquake, but has since been reconstructed using the original materials. The oldest original keep is probably the beautiful Matsumoto, which can be reliably dated to 1597. Older keeps exist, but they have all been relocated to their present sites. Hikone's keep, for example, started life as Otsu castle in 1575 and was moved to its present location in 1606. Of castles in existence in situ prior to the siege of Osaka in 1615, Inuyama, which looks down dramatically on the Kiso River, dates from 1600, Matsue, on the coast of the Sea of Japan, from 1611, and the peerless Himeji was built between 1601 and 1610.

All these examples, therefore, date from a time when wars were still continuing, so the popular view that consigns Japan's extant castles to a time when wars had ceased is far from the truth. Quite elaborate structures existed during the age of samurai warfare, and this can be confirmed by pictorial sources, in particular the painted screens produced to commemorate famous battles in which their patrons took place. One important source is the Nagashino screen in the Tokugawa Art Museum in Nagoya. This shows the famous charge by Takeda Katsuyori (see Osprey's Campaign 69: *Nagashino 1575* by the same author), and in the right-hand corner there is a representation of a castle. The actual castle of Nagashino was probably a simpler structure than the stylised one shown here, as it was a frontier emplacement out in the country, but the castle on the screen may be justifiably regarded as a good example of the developed form that would be used as a *daimyo's honjo.* One other very important source is the screen of the *Summer Campaign of Osaka, 1615.* Here the representation of the keep tallies very well with what is known of its contemporary appearance.

Far from being a product of the peaceful Edo Period, therefore, the elaborate tower keep, designed as much to impress an enemy by a display of the *daimyo's* wealth as for military considerations, was an integral part of Japanese castle design almost as soon as the techniques were developed to allow it to be built. In fact one of the most spectacular keeps of all was one of the earliest. This was Oda Nobunaga's glorious castle of Azuchi, burned by rebels at the time of Nobunaga's murder in 1582. Nothing remains of Azuchi above its stone base, but enough illustrations and descriptions of it have survived to allow its appearance to be reconstructed with some confidence. One feature of Azuchi, never repeated anywhere else, was the building of an octagonal tower as the uppermost of its seven storeys.

In 1586 Toyotomi Hideyoshi, who succeeded Nobunaga, commissioned Osaka castle, which was to add its own chapter to the history of Japanese castle building. It was built on the 'great slope' *(o-saka)* that had formerly housed the fortified cathedral of Ishiyama Honganji, the headquarters of the fanatical



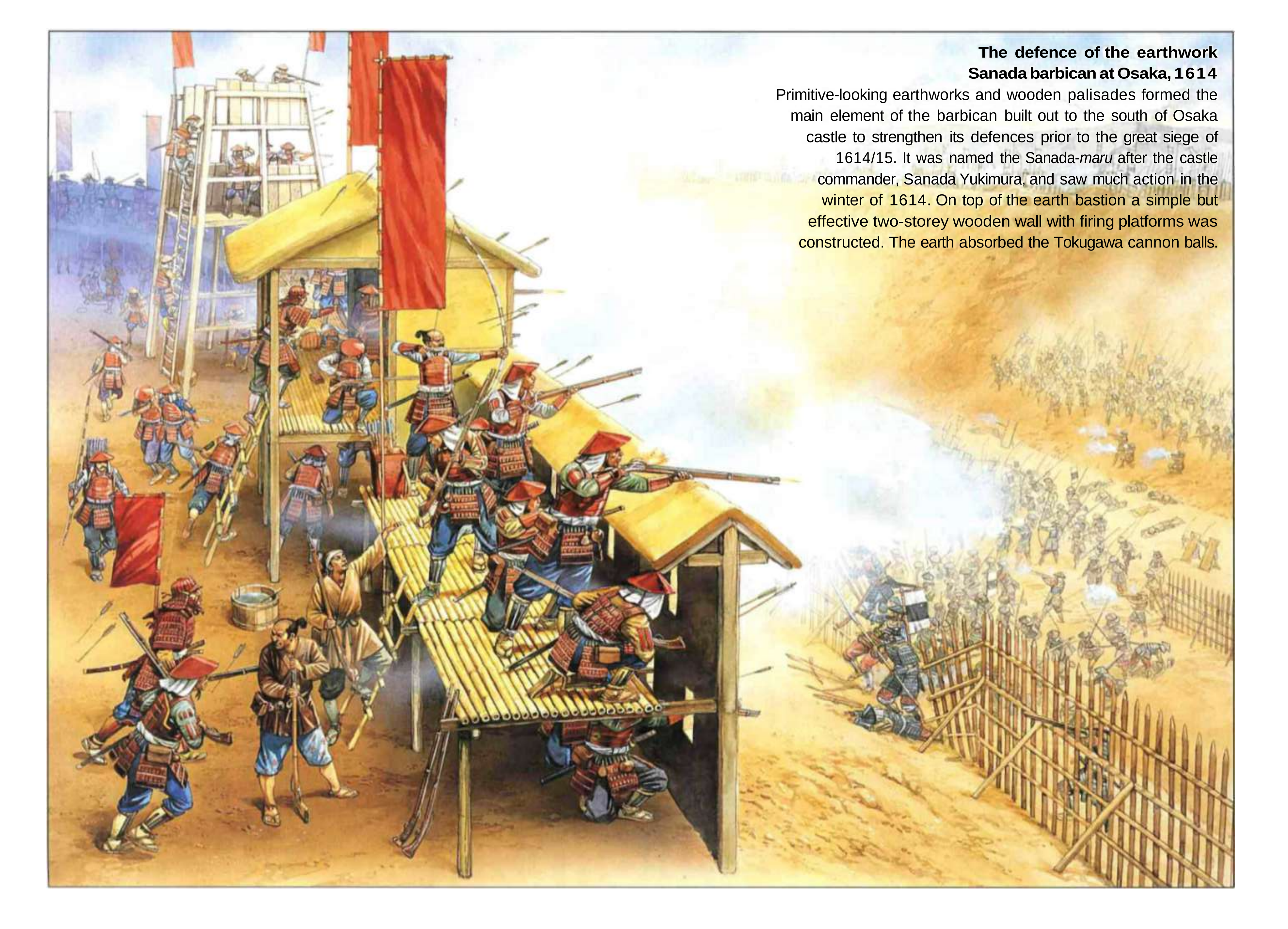
Inuyama castle holds a dramatic and romantic position above the Kiso River. It is still owned by the same family who built it in the 17th century.

Ikko-ikki sect who had defied Oda Nobunaga for ten years in Japan's longest ever siege. The solid base, although of modest height, lay in the midst of a bewildering maze of rivers, reed beds and ever-changing islands that made up the estuary of the Kiso River where it entered Osaka Bay. This topography, the classic *hirajiro* situation, was cleverly exploited in the construction of Osaka. Concentric rings of huge stone walls built around earth cores provided multiple layers of defence with little height advantage until one moved closer to the central keep, which was of such a size as to dominate its surroundings completely.

As noted above, it is the existence of the huge stone bases, rather than any particular superstructure on top of them, that essentially defines the Japanese castle. However, the passage of time has made it increasingly difficult to study them properly. This is sometimes because of neglect of the site or alternative use of the land (which is often prime city-centre real estate), and in some cases the site has been harmed by the rebuilding of the original castle tower in concrete. This has happened, with less than perfect results, at Nagoya and Osaka, and some reconstructions elsewhere have not even been built in the original place.

Japanese castles in Korea

Curiously, one of the best places to see Japanese castles in their original state is not Japan at all but South Korea. When Japan's invasion of Korea in 1592 faltered in the face of Chinese and Korean counterattacks, the Japanese forces raised a series of coastal forts called *wajo* (the castles of Wa, i.e. Japan) to protect their communications. As the native Korean castles had fallen so easily to their blitzkrieg advance the Japanese turned to their own tried and tested method of carving up a hillside and cladding it with stone to produce a fortress. The immense amount of labour required to produce such structures in a short time was provided by press-ganged Koreans or Japanese peasants shipped across the sea. As there was no time to raise huge tower keeps on these structures (and Ulsan castle was besieged even before it was finished) only the simplest of



The defence of the earthwork Sanada barbican at Osaka, 1614

Primitive-looking earthworks and wooden palisades formed the main element of the barbican built out to the south of Osaka castle to strengthen its defences prior to the great siege of 1614/15. It was named the Sanada-*maru* after the castle commander, Sanada Yukimura, and saw much action in the winter of 1614. On top of the earth bastion a simple but effective two-storey wooden wall with firing platforms was constructed. The earth absorbed the Tokugawa cannon balls.

towers were added, although a European visitor remarked on how lavish the interior decoration of the domestic buildings could be. The *wajo* had a very short lifespan, four years at the most, and were abandoned to the elements when the Japanese finally departed in 1598 and they remain in the same state to this day.



When Japan's invasion of Korea in 1592 faltered in the face of Chinese and Korean counterattacks, the Japanese forces raised a series of coastal forts called *wajo* to protect their communications. This is one of the best preserved examples, the *wajo* of Sosaengp'o.

The use of earthworks

There is a considerable body of evidence to suggest that walls of earth formed part of some Japanese castle designs. As in the European context, earth bastions had the advantage of speed and economy, although they were always a temporary solution. The most important example of the use of earth ramparts by the Japanese occurred in Korea in 1593. Being faced with the rapid advance of a Chinese army with a formidable artillery capability against P'yongyang, the Japanese army abandoned the native Korean stone walls of the city and took to the spade to throw up earthworks outside the walls. The Ming commanders, proud of their Great Wall of China, scorned these 'burrows' as the creations of barbarians until they felt the arquebus balls discharged from behind them, and in any case when winter came the earth ramparts froze as solid as stone.

Earthworks also formed the main element of the barbican built out to the south of Osaka castle to strengthen its defences prior to the great siege of 1614/15. It was named the Sanada-*maru* after the castle commander, Sanada Yukimura, and saw much action in the winter of 1614. On top of the earth bastion a simple but effective two-storey wooden wall with firing platforms was constructed.

The Sanada-*maru* was essentially a temporary structure to meet the demands of the moment, and was not copied elsewhere. Instead the final flourish in Japanese castle design went to the other extreme, and by the time of the fall of Osaka in 1615 the keeps that now grace the Japanese landscape had all been completed. Like so many other things in Japanese military history, with the establishment of the Pax Tokugawa developments in castle architecture came to an end. The castles might be rebuilt after fires or earthquakes, but until the coming of Europeans in the 19th century forced a reaction, the Japanese castle remained as the most visible and attractive symbol of past military glory.

Elements and features of the Japanese castle

All castles of the 'developed' style (those with stone bases and a complex of buildings) had certain design elements in common, which may be usefully explored by looking at a typical castle of the period, such as Hikone or Matsue, from its overall layout to the roof of its keep.

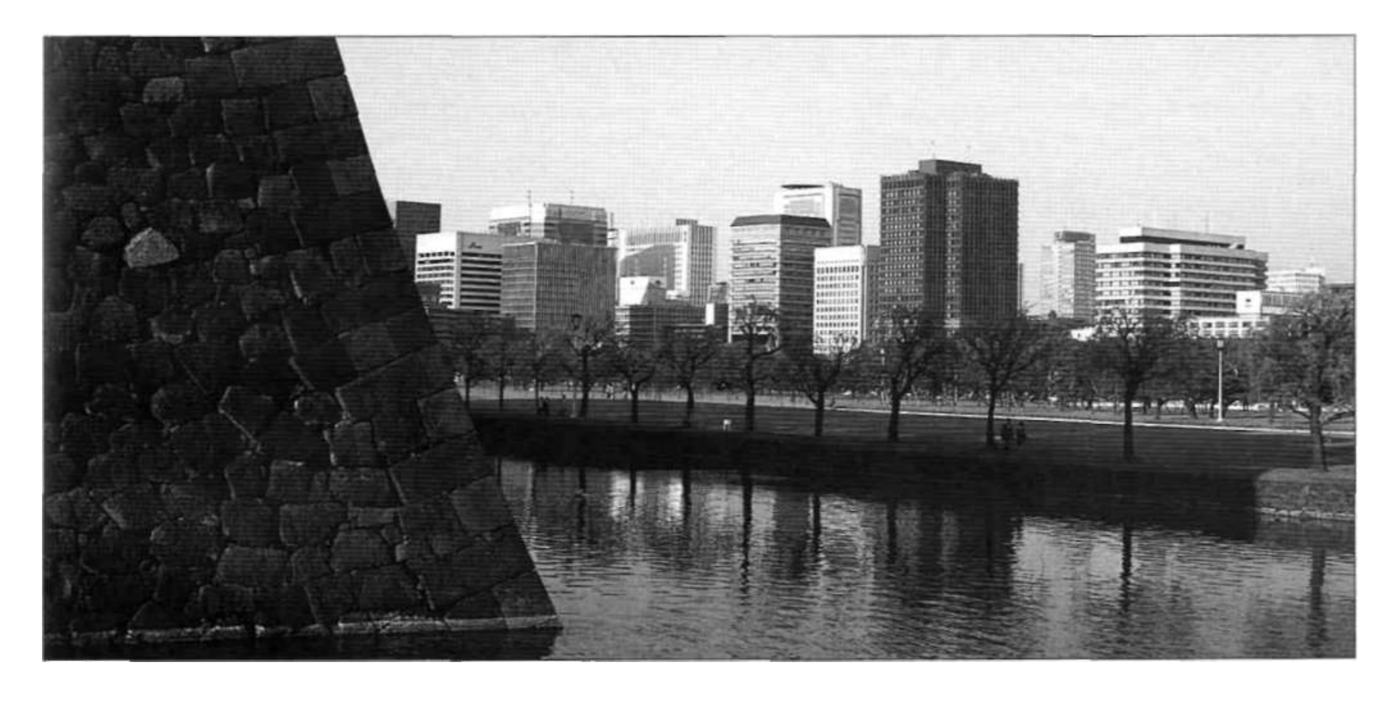
The overall layout

The first feature common to all the Japanese castle sites was an overall style whereby the keep lay at the highest point of the area enclosed by the castle and was surrounded by a series of interlocking baileys. The general term for the numerous courtyards and enclosed areas formed by this kind of layout was *kuruwa.* Some were on the same level, paths and staircases linked others, and the way in which the *kuruwa* related to each other was one of the first points to be taken into consideration by the castle designer. He adopted a method of planning known as *nawabari,* which literally meant 'marking with ropes'. As the term implies, this referred to the very practical first step in designing a castle, which was to mark out the future extent of a castle using ropes.

One of the most important considerations for a castle's defensive system was how these *kuruwa* would provide an overall defensive pattern for the castle, a matter that was often determined by the local topography. Rivers, mountains and the sea all set limits on the scope of a design. Nagashino castle, site of the famous siege and battle of 1575, was built on a triangular rock where two rivers joined. Takamatsu and Karatsu used the sea as their moats, while Takashima and Zeze used Lake Suwa and Lake Biwa respectively to provide water defences in a style sometimes called *fujo,* or 'floating castles'. Inuyama utilises a river and a high mountain as two natural defensive elements, while Bitchu-Matsuyama gazes down from the highest castle hill in Japan.

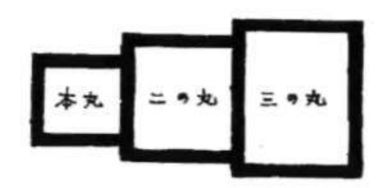
The central area of the *kuruwa,* which is frequently all that has survived in many castles, was the most important in terms both of defence and display. Its core was called the *hon maru* (main or innermost bailey) and contained the

Many Japanese cities have an area called Marunouchi, in other words 'the area inside the *maru* or bailey'. Tokyo's Marunouchi district is shown here. It lies between the imperial palace and Tokyo Central Station.









The three common styles of castle layout, from top to bottom: *rinkaku* (concentric): *renkaku* (offset) and *hashigokaku* (tiered).

keep and any other residential buildings for the *daimyo's* use. The second courtyard was called the *ni no maru* (second bailey) and the third was the *san no maru* (third bailey). The expression *'maru'* has survived to this day in the form of addresses in old castle towns. Many have an area of the city called Marunouchi, in other words 'the area inside the *maru'*. Tokyo's Marunouchi district, for example, lies between the imperial palace and Tokyo Central Station.

Tokyo provides an extreme example of a castle's outer works having disappeared under modern development, and the ground plans of earlier castles are sometimes all we have to go on when it comes to determining the layout that a castle once possessed. Archaeology and field observation can give further clues, and the resulting layout designs may be classified as follows:

1. *Rinkaku* style

The *rinkaku* style has the *lion mam* in the centre and the *ni no maru* and the *san no maru* arranged in concentric rings around it. Although this may seem to be the ideal style for the defence of the *hon maru*, there are surprisingly few examples of this type of castle. There are two possible reasons for this. Firstly, the moats and stone walls of such a castle had to be extremely long compared the small area on which the *hon maru* was built. Secondly, such defence works were very labour intensive and therefore very costly. The ruined Shizuoka and Tanaka castles follow this style, while mighty Osaka is the nearest surviving approximation of it.

2. *Renkaku* style

The *renkaku* style has the *hon maru* in the centre with the *ni no maru* and the *san no maru* on either side. When building a castle of this style, it was necessary to provide extra protection for the more exposed *hon maru.* Mito and Sendai are examples of the *renkaku* style.

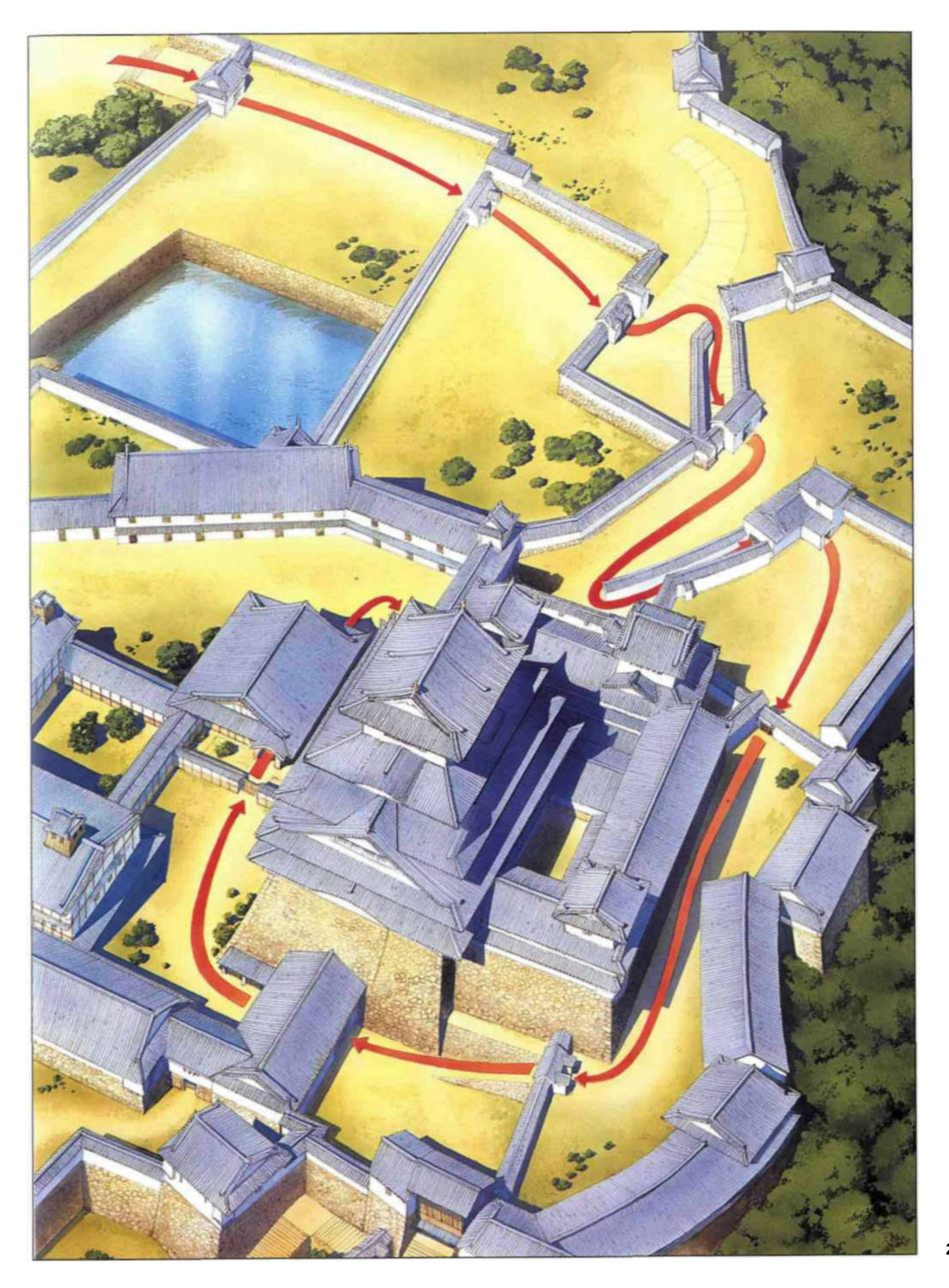
3. *Hashigokaku* style

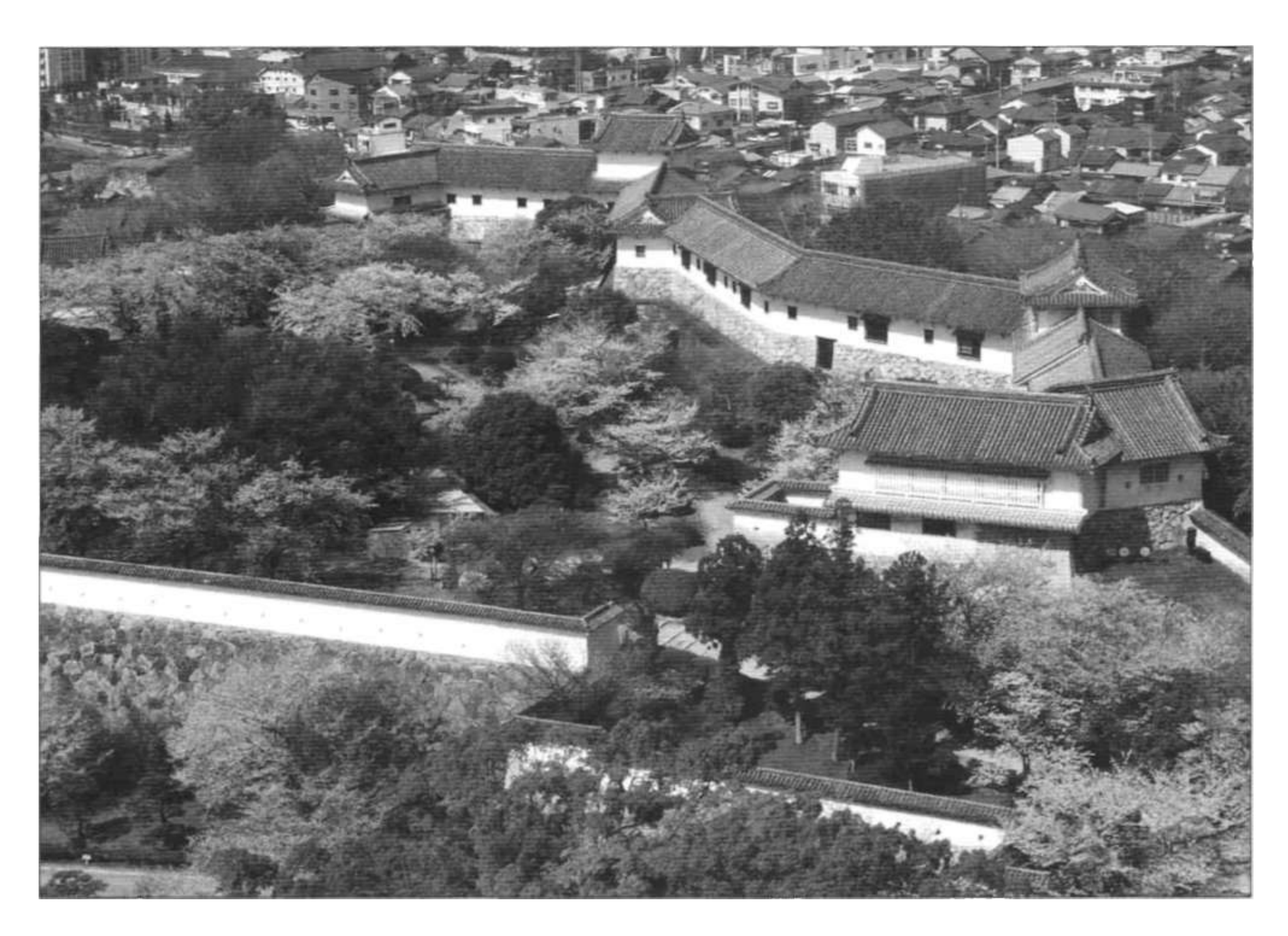
In the *hashigokaku* style, which can only apply to a *yamashiro* setting, the *hon maru* forms the apex of the castle while the *ni no mam* and the *san no maru* descend in steps like a staircase. As the *hon maru* is exposed on one side, it

OPPOSITE **The maze of walls and gates that make up the defences of Himeji castle, 1611**

One of the most important defensive elements in the developed style of castle was the need to make the approach to the keep as difficult as possible. The ultimate example is the maze created by the succession of walls, gates and baileys at Himeji, which can still be enjoyed today. The successive gates are labelled in the Japanese alphabetical system of 'i, ro, ha, ni, ho, he', although some of the final Water Gates no longer exist. Only the 'upper route' is described, though there was also a lower route that was even more fiendish.

On proceeding north through the *San no maru* (Third Bailey) we come to the imposing gate known as the Hishi Gate, but this is just the beginning of a long journey before we enter the keep, during which we will be under observation the whole time and will travel in a spiral. Straight ahead and a little to the left is the first of the alphabetical gates. Gate I, from which we proceed, again in straight line but a little to the right this time to Gate Ro. We cannot see Gate Ha from here, and if we go straight on there is a dead end. Instead we must go to the left, and here the path forks. The left fork leads into the *Nishi no maru* (Western Bailey) and ultimately back outside Gate I, but we want the right fork for Gate Ha, from where the keep looks so near one could almost touch it. But this is where the labyrinth really begins, because to get from Gate Ha to Gate Ni we have to make a 180-degree turn round the end of a wall, and follow a very narrow approach. Passing through the menacing Gate Ni, where the gate is so much smaller than its gatehouse would suggest we must make sure we do not miss little Gate Ho. or there will be another dead end. After Gate Ho we turn right round the far corner of the keep through Gate He, and then through one of the surviving Water Gates into the Inner Bailey, bare now, but which had other buildings in it in 1611. We climb up some steps to the remains of the Fourth Water Gate and enter the final gate to the keep that is the Fifth Water Gate. This is the strongest of all and is almost invisible until you arrive at it, being located under the bridging tower between the keep and the north-western tower.





The developed style of castle had a maze of interlocking walls and gates that would confuse an enemy and allow him to be observed for every inch of his way up to the keep. Himeji. with its 21 gates and labyrinthine walkways that literally turn back on themselves, is the perfect example, and its outerworks are seen here.

needs to back onto a lake, river or cliff. Aizu-Wakamatsu, site of fierce resistance during the Meiji Restoration, is an example of *hashigokaku* style, while Inuyama on the Kiso has a dramatic cliff on the *hon maru* side.

In the case of a larger castle, the three *maru* would in turn be encircled by two or three outlying *kuniwa* referred to as *sotoguruwa* or *soguruwa* (the outer courts). Each of these successive areas was so arranged that any line of defence captured by an enemy could readily be recaptured from the area inside it. The ultimate result was a maze of interlocking walls and gates that would confuse an enemy and allow him to be observed for every inch of his way up to the keep. Himeji, with its 21 gates and labyrinthine walkways that literally turn back on themselves, shows this principle to perfection, and will be described in detail later.

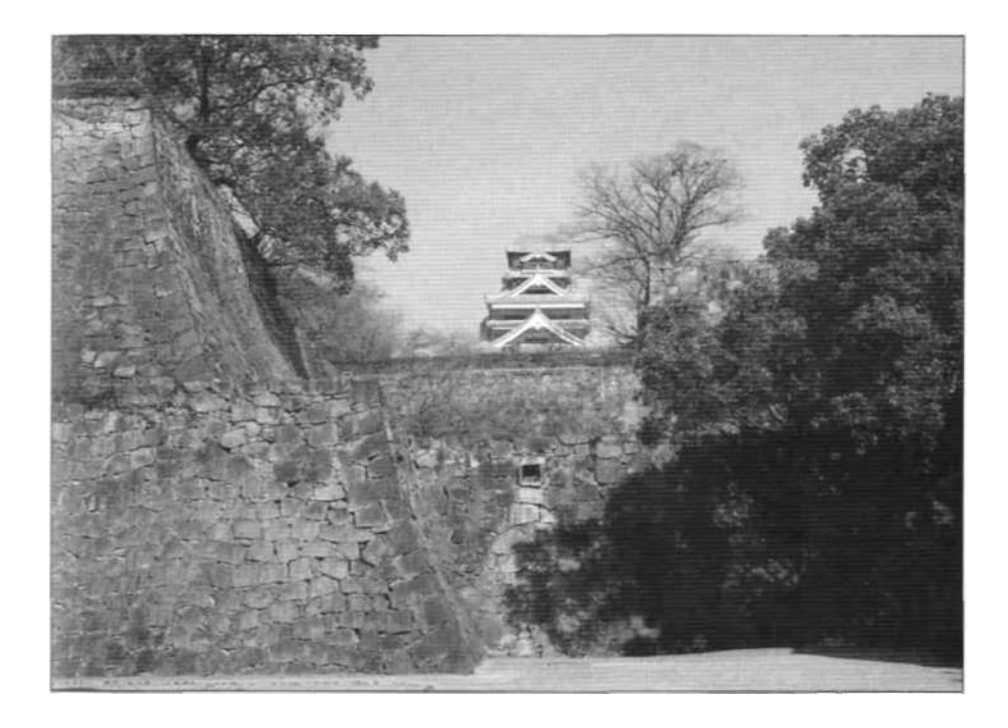
The castle wall

The successive *kuniwa* and *maru* were divided from one another by moats, ditches and two sorts of walls, the smaller ones on top of the stone bases and the bases themselves, which presented a wall-like outer surface of roughly hewn and partly dressed stone. No mortar was used, making them the world's greatest dry stone walls. At first sight the walls look as if the stones were placed haphazardly, but in fact they followed a very careful geometric arrangement whereby the stones settled into a compact solidness through their own weight. The outward curve, if any, is concave in shape, resulting from the stones being placed with their smaller sides outwards and their larger sides inwards, although earlier examples tend to be straighter.

Behind these large stones, and rarely seen, are two layers of pebbles that were settled into the excavated earth core of the wall and base. Smaller stones were also used to fill up gaps in the outer wall surface. In cross section a castle's

stone base is wedge shaped, and some reach a height of 130 feet. What made up a castle's foundations, therefore, was a series of these stone bases holding up towers and gateways linked by other sections which only housed low walls of plaster on top of them. Nevertheless, all these stone bases were of a similarly formidable thickness, and their outer surface projected in and out to give well-constructed and overlapping defences.

The small walls of plaster and ground rock on top of the bases were surprisingly solid, and would be pierced with openings - triangular for guns, rectangular for arrows. These walls add greatly to the aesthetic appeal of the castle. The white walls of Himeji are quite splendid, and the black 'long wall' of Kumamoto is a tremendous architectural feature. As they were small, these



LEFT The magnificent stone bases that make up Kumamoto castle are among the largest in Japan, and from inside the dry moat they even seem to dwarf the mighty keep.

BELOW Built up on top of the stone bases were the small white walls pierced with triangular gun ports and rectangular arrow ports as shown here at Himeji.



minor walls were frequently buttressed using wood or stone. Behind the small walls a row of trees, usually pines, would be planted. These would act as a shield from arrows and bullets, but could also provide timber in the case of a prolonged siege, and added greatly to the decorative effect that was in any case part of the overall plan. Within the outer walls trees were also planted to veil the movements of soldiers within the defences and to provide a food source.

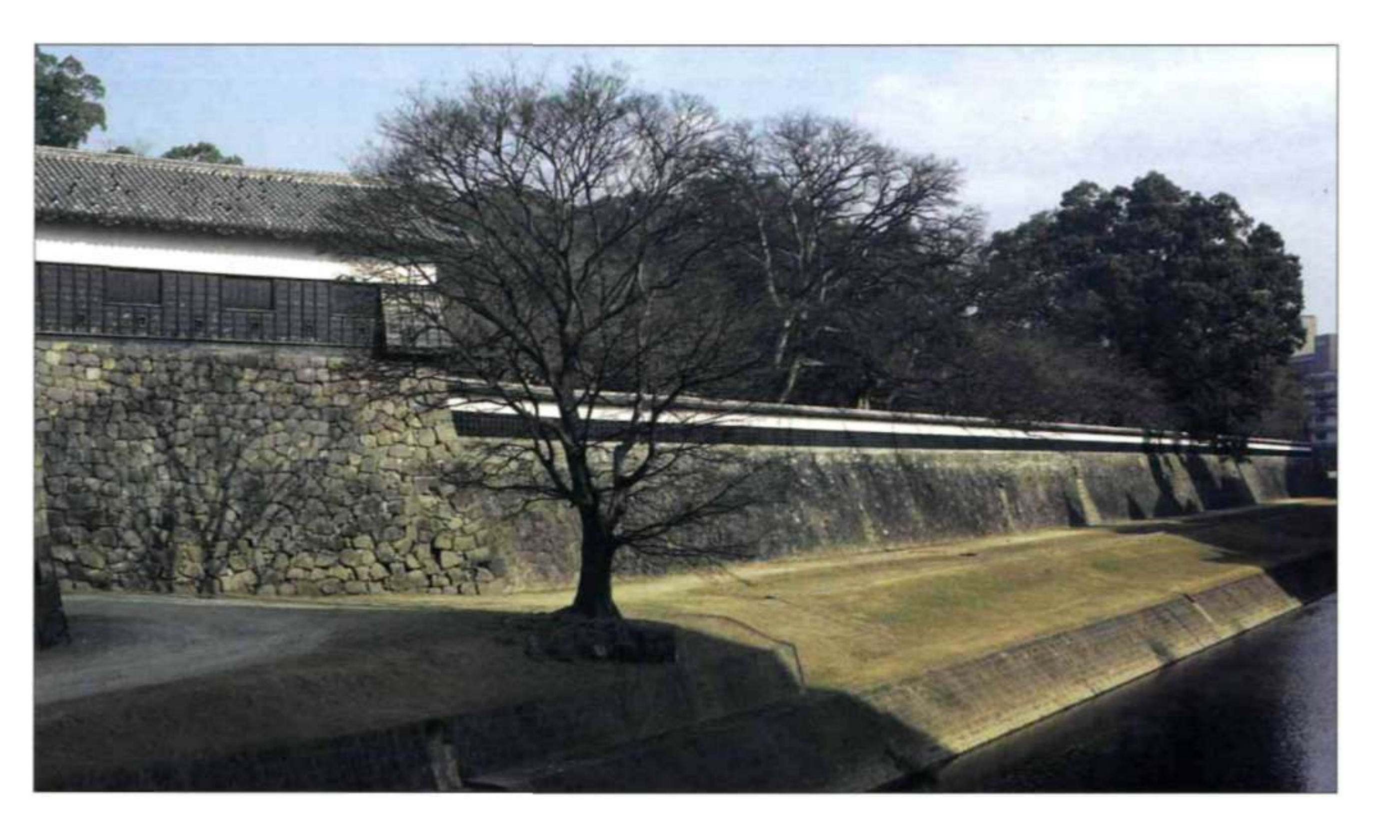
Bridges and gates

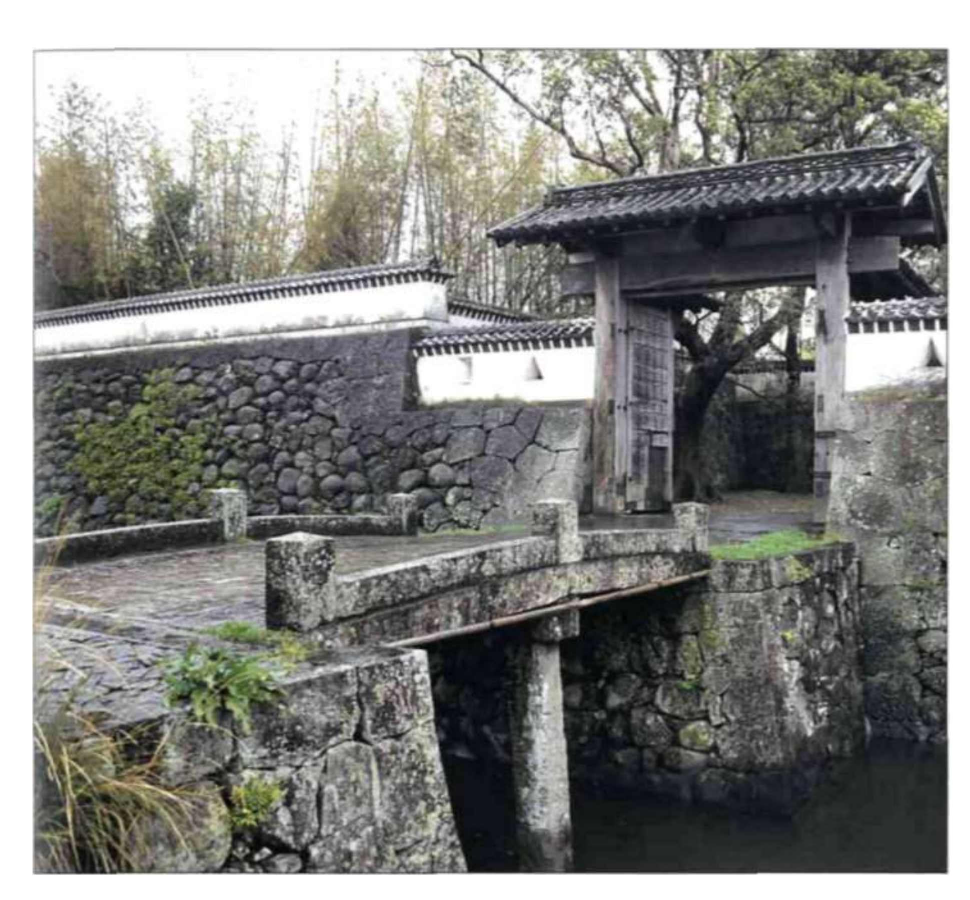
Roadways were provided to give access to the castle complex from outside. Sometimes these were conveyed across bridges, otherwise through a smaller version of the stone bases described above. The entrance at the front of the castle was usually called the *ote* (meeting place), while the gate it leads to was known as the *otemon.* The passage on the postern was called the *karamete,* meaning 'the place where prisoners will be captured', because postern gates were used as sally ports for surprise attacks.

Bridges came in many different styles. They were usually of wood, although Fukue castle on the Goto islands provides an unusual example of a stone bridge. Of the fixed wooden bridges, most tended to be of cantilevered construction and could be very graceful. The ones at Hikone and Matsumoto are particularly pleasing examples. No actual drawbridges appear to have survived anywhere in Japan, but we know they existed from drawings and descriptions, although they were very rare. A variation on the conventional European drawbridge was also found in Japan. This was a removable bridge that could be rolled out on wheels across a gap along very narrow horizontal supports.

Of the buildings that were part of a castle's superstructure, the ones that a visitor first encountered were the gatehouses. A castle gatehouse would make up quite a complex micro-system of defence. A pair of gateways would cover entrances. The first was directly open onto the roadway, and sometimes had small roofs projecting outwards on the forward support of the gate. The second, inner, gate would be set at right angles to the first so that an attacker would have to make an abrupt turn. In the case of castles built on a hill the second gate would often be positioned so it was higher than the first, a feature shown

The black and white 'long wall' of Kumamoto castle is the finest example of the small wall, and provides one of the outstanding architectural features of this castle.





LEFT Fukue castle on the Goto islands provides an unusual example of a stone bridge. It leads to a simple castle gate.

BELOW The high wooden bridge of Hikone castle, which featured in the film *Shogun.*

ABOVE Of the buildings that make up a castle's superstructure, the ones that a visitor would first encounter were the gatehouses. A castle gatehouse would make up quite a complex micro-system of defence. Entrances would be covered by a pair of gateways.The first was directly open onto the roadway, as shown here at Wakayama.



RIGHT The second, inner, gate would be set at right angles to the first and was often of a two-storey construction, so that an attacker had to make an abrupt turn. In the case of castles built on a hill the second gate could be higher than the first, a feature shown here at the Taiko Gate of Hikone.

very well at Hikone. Whatever the arrangement, there was always a roughly rectangular-shaped area between the gates that was fully enclosed and overlooked from all points. This space was called the *masugata,* from the shape of the measuring vessel (*masu*) commonly used for liquids and grain. Another meaning of the term derives from the fact that a castle commander could assemble his men in sections in this area and thereby count them. Small, so-called *uzumi* or 'secret gates' also appear in concealed places along the walls. The actual gates that were hung in the gatehouses were of heavy timber on massive iron hinges, and were reinforced with iron plates and spikes.

Castle towers

Gatehouses that were built in the form of a tower were called *watari yagura,* meaning 'the tower that bridges both sides'. *Yagura* was in fact the generic name for a tower; the word literally means 'arrow store', which was one of their original functions. However, *yagiira* in a Japanese castle could take many different forms apart from the conventional Western understanding of the word 'tower'. One common variety was the *tamon* or *tamon yagura,* which was a long one-storey building set on top of a stone base acting as a defensive wall, a lookout post and a utility building all in one. The name may derive from Tamon castle, which was built by Matsunaga Hisahide and where such a



Detail of the gate hung in one of the gatehouses at Tottori castle, showing iron reinforcements and spikes.



The *tamon yagura* at Hikone. showing the finest example of the *tamon* style of tower, which combined the functions of tower, outbuilding and wall in one structure.

structure was effectively the first Japanese castle keep. The fine *tamon yagura* at Hikone was used by the maidservants as living quarters.

At the corners of the walls may be seen other towers of two or three storeys. Known simply as *sumi yagura* (corner towers) they comprised an important element in the overall castle design. Corner towers were often fitted with *ishi otoshi* (stone droppers), which were the Japanese equivalent of machicolations. The Inui tower of Osaka castle, which lies at the northwest corner of the complex, has the unusual feature of having two storeys of equal size. Matsumoto castle has a subsidiary tower that is open on the eastern and southern sides. Called the Tsukimi tower, it was not designed as a military structure, rather for moon-viewing.

The castle keep

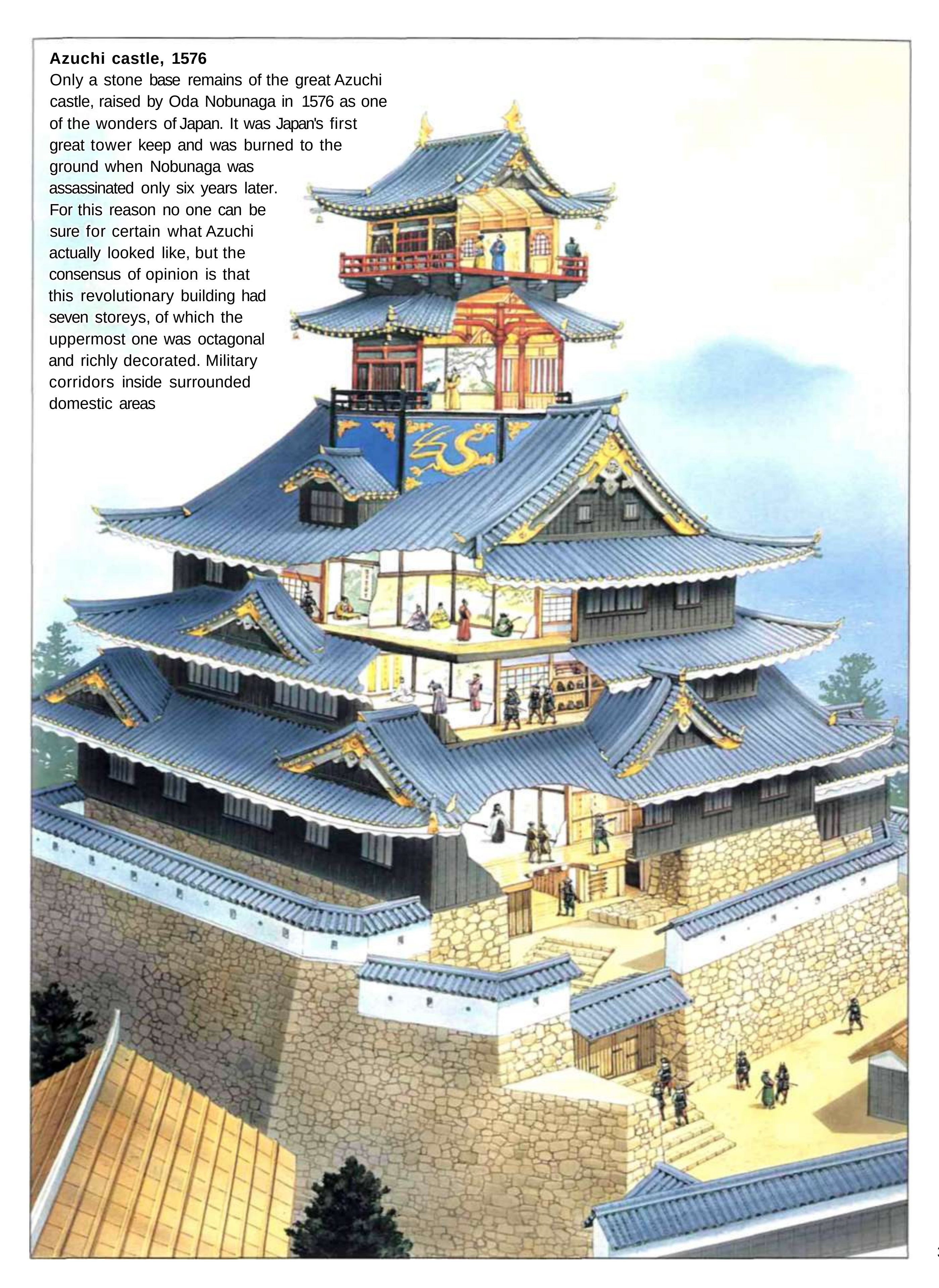
The largest tower of all in a Japanese castle is the *tenshu kaku* or keep. The name means 'high heavenly protector' and height is usually the first characteristic that is noticed. In many cases, in fact, the keep will have caught the visitor's eye long before he appreciates the gates or corner towers, because the keep is almost invariably the highest point of the entire structure and may be visible for miles. In some cases only the keeps of Japanese castles have survived, which can give a misleading impression of the original design of the fortress. Inuyama and Maruoka castles display the earliest features of the Japanese keep.

A typical keep would be of at least three storeys, maybe even as many as seven, but frequently their outward appearance did not correspond exactly to their actual interior structure and design because there were often underground cellars built deep inside the stone core of the base and the number of floors above ground was often not discernible from the apparent number visible from outside. The purposes of a keep included the following key functions:

1. To provide a vantage point
2. To act as the final line of defence
3. To symbolise the *daimyo's* power
4. To provide secure storage.

As the Portuguese Jesuit Joao Rodrigues put it:

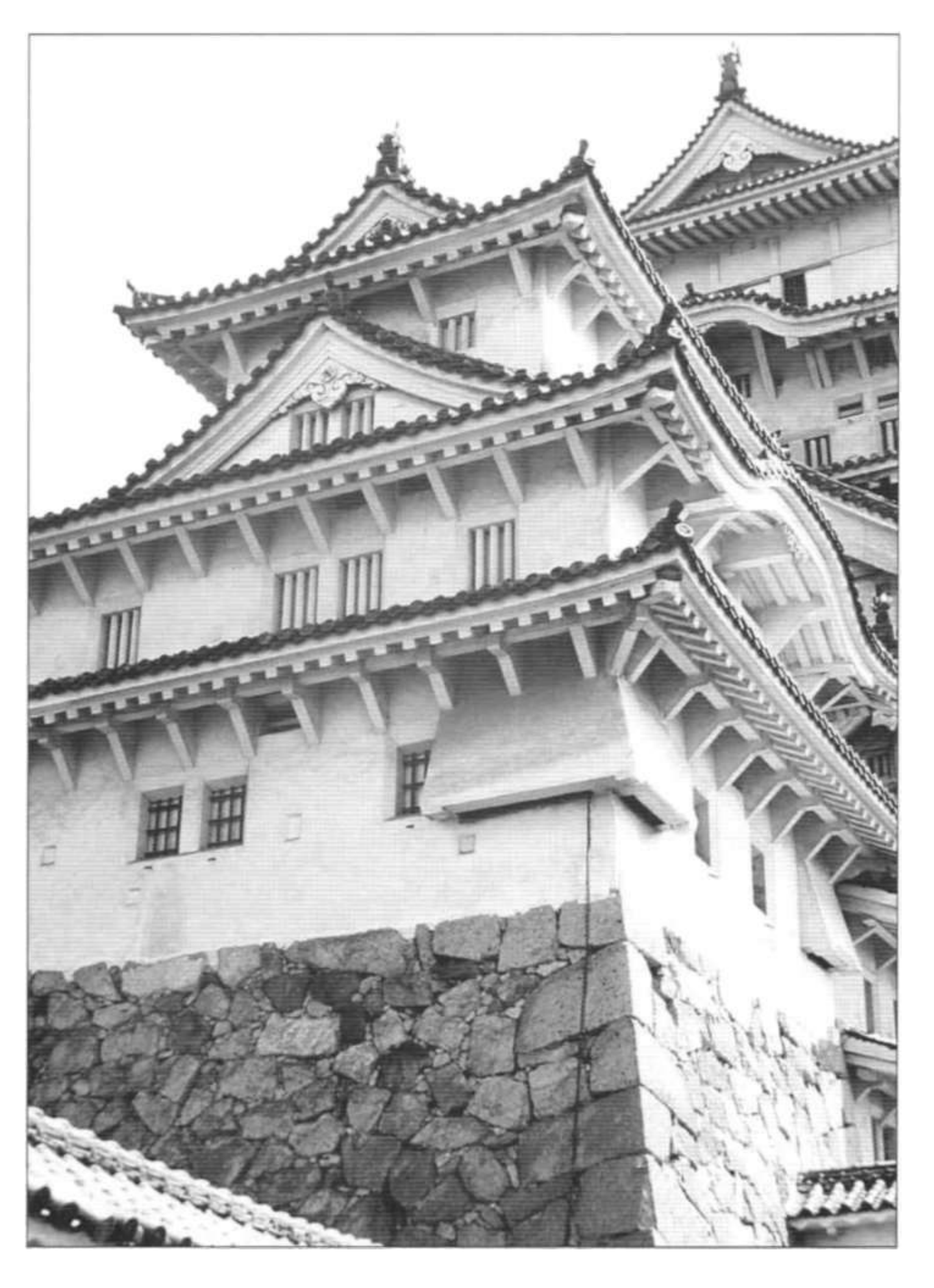
> They keep their treasure here and it is here that they assemble their wives in time of siege. When they can no longer hold out, they kill their women



Azuchi castle, 1576

Only a stone base remains of the great Azuchi castle, raised by Oda Nobunaga in 1576 as one of the wonders of Japan. It was Japan's first great tower keep and was burned to the ground when Nobunaga was assassinated only six years later. For this reason no one can be sure for certain what Azuchi actually looked like, but the consensus of opinion is that this revolutionary building had seven storeys, of which the uppermost one was octagonal and richly decorated. Military corridors inside surrounded domestic areas

This view of the keep of Himeji shows several important features. First is the use of two styles of gables. The first style, *chidori hafu,* is roughly triangular in shape. The second, *kara hafu,* is curved, with the apex flowing into the line provided by the cornice. There is also a prominent stone-dropping hole on the outer corner.



and children to prevent them falling into the hands of the enemy; then after setting fire to the tower with gunpowder and other materials so that not even their bones or anything else may survive, they cut their bellies.

The first tower keeps (including the original one at Himeji, demolished in 1601) were less ornate structures, resembling larger versions of the simpler corner towers, however, when embellished to the extent revealed by many surviving examples they make dramatic statements of a *daimyo's* power. Unlike almost anywhere else in the castle, the windows, roofs and gables of the keep were arranged in subtle and intricate patterns. The shape of the keep's roof was almost without exception in the ornate style that had been used for centuries for the most palatial residences, and the use of two contrasting styles of gable on the same elevation of a keep was also a frequently noticed aesthetic element. The first style, *chidori hafu,* was triangular in shape. The second, *kara hafu,* was curved, with the apex flowing into the line provided by the cornice. This style of architecture can be seen to good effect at Himeji.



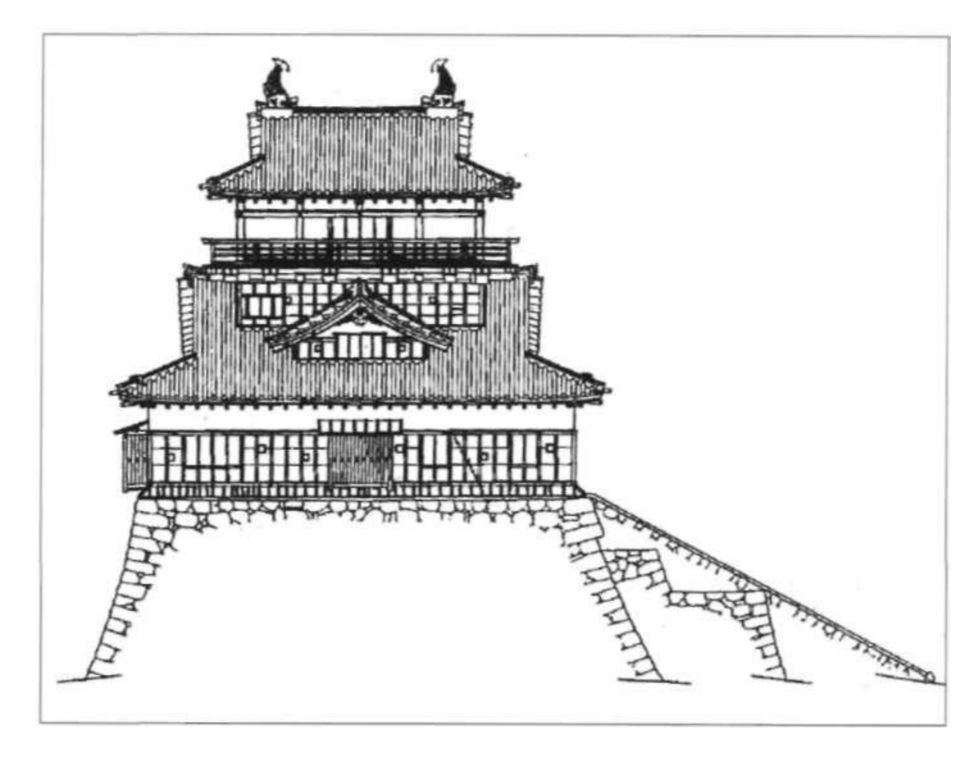
It is rare to have a view of the roof of a Japanese castle's keep from above, but this is provided here by the reconstructed Fushimi Momoyama castle near Kyoto.

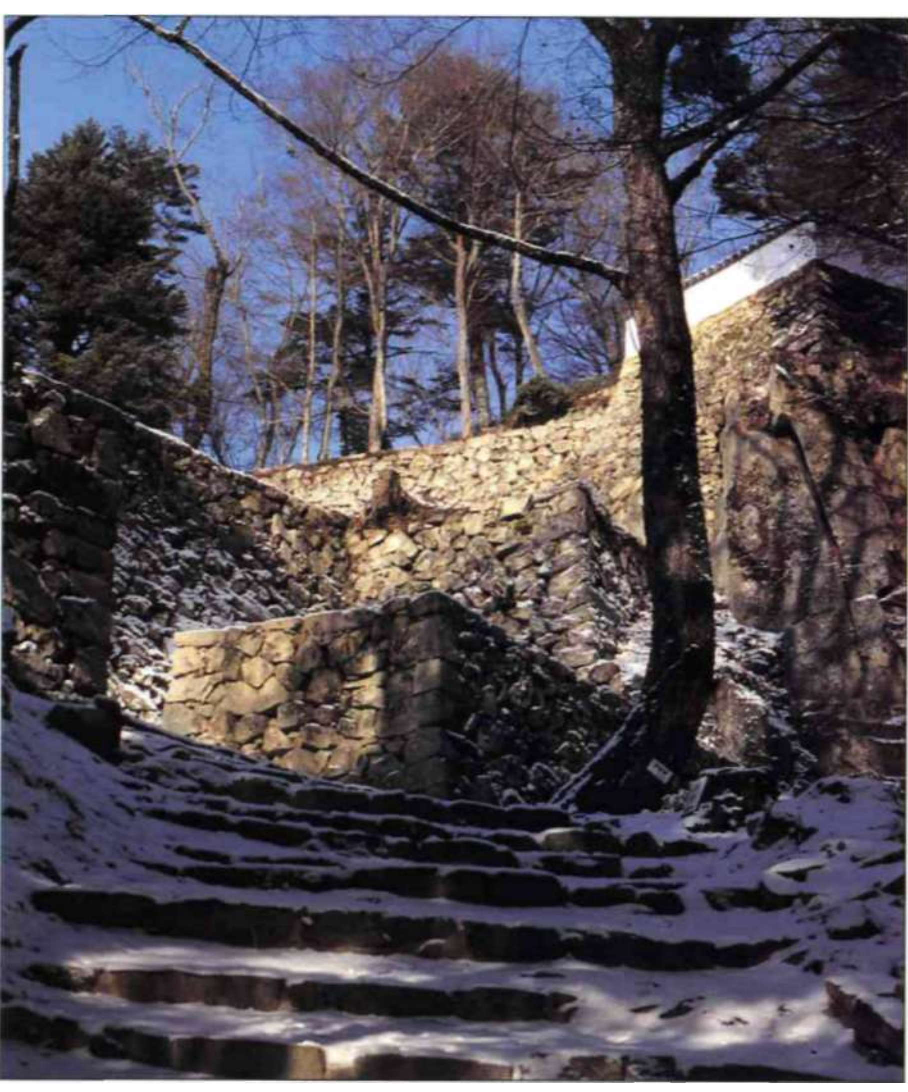
The windows of a keep were generally square, though the uppermost storey was often provided with ornate windows in the shape known as *kato mado,* and usually had an exterior balcony. Roofs were almost always tiled with thick blue-grey Japanese tiles, though in the early days some castles had thatched roofs, and old photographs of Iwakuni castle confirm that it was once roofed with wooden shingles. The ridge of the topmost roof of the keep was also usually decorated with *shachi* (dolphins) made of metal or tile. These striking ornaments in the shape of fish are supposed to be charms against evil spirits and fire. They are sometimes gilded, and there is a charming story told about the *shachi* on the roof of Nagoya castle, which were made from a core of cypress



This view looking across Osaka from the uppermost storey of the castle keep shows the layout of the inner wet moat and one of the golden *shachi,* the so-called 'dolphins' that protected the building from fire.

The entrance to the keep of Maruoka castle is accessed by means of a long stone ramp built into the stone base. This keep dates from 1576.





At Bitchu-Matsuyama a long climb provides the reward of seeing stone walls integrated superbly with the natural rock.

wood covered in lead and copper, and finally coated with pure gold. A thief had himself floated up by means of a kite to steal the gold scales from the fish!

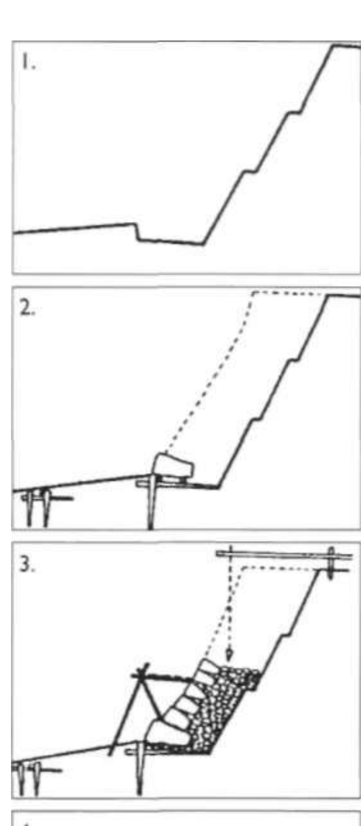
The external colour of surviving keeps is usually white; however, this was not necessarily their original colour. Both Azuchi and Osaka are known to have sported bright colours and designs of tigers and dragons on their exterior surfaces. The exceptions are the so-called 'black castles' such as Kumamoto and Okayama, where the predominant colour comes from the black wood that dominates the white plaster around with only the *mon* (family crest) of the *daimyo* carved on the apex of the gable ends for decoration.

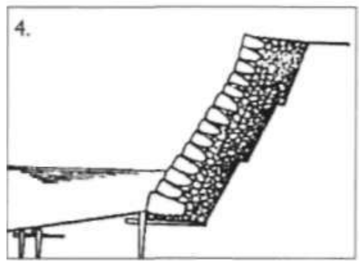
In some cases topographical considerations led to the construction of keeps of unusual shapes. The ideal shape for a stone base was rectangular, but this was not always achievable, especially when the base had to be built round the core of an extinct volcano, as is the case with Wakayama castle. In spite of intensive cutting away of the hill top, the resulting area was so limited that the keep had to be rhombic in plan with all corners of the building curved, while the small tower adjacent to the keep was built on an irregular pentagonal first storey. At Kumamoto castle the first storey actually overhangs the stone base so as to give a rectangular shape, and the extra space created was used to provide an area for dropping stones. At Bitchu-Matsuyama a long climb provides the reward of seeing stone walls integrated superbly with the natural rock, inside which the complex housing the keep makes the best possible use of the restricted space available.

Building a castle

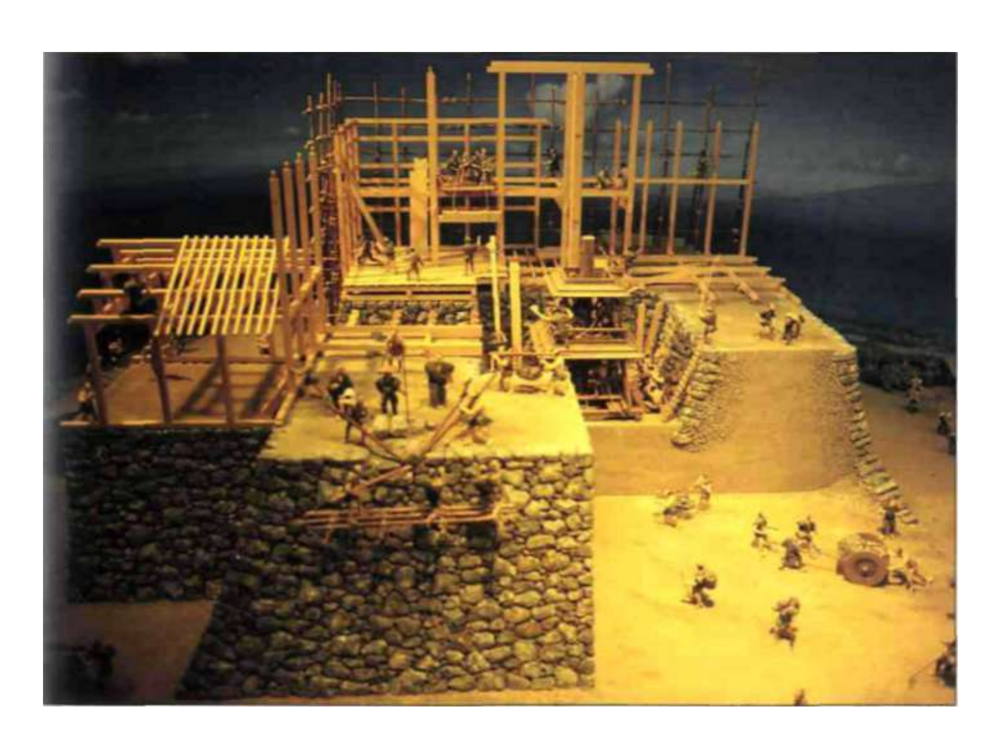
The building of a pre-stone *sengoku yamashiro* has been adequately described above, but the construction of a developed stone-clad model complete with tower keep was an altogether different process.

Firstly, the chosen site was surveyed, and the architect designed on paper the best style of castle layout commensurate with the constraints of the site. Before any actual building began, however, there would be a religious ceremony conducted by a Shinto priest. This consisted of ritually cutting the first sod within a sacred enclosure formed by fastening four ropes to four green bamboo poles. From the ropes paper *gohei* (streamers) would be hung. With the *daimyo* and his representatives watching, a ceremonial offering of rice and salt would then be made.





The stages of building the stone base of a castle.
1. The hillside is carefully carved away, staggered for safety.
2. The vital *ne ishi* (root stones) are laid in the precise position determined by wooden supports.
3. While wooden scaffolding and walkways allow the workmen to operate in safety, the curve of the wall is followed, with pebbles being rammed behind the line of the outer stone surface.
4. The wall is completed, and the moat is filled.



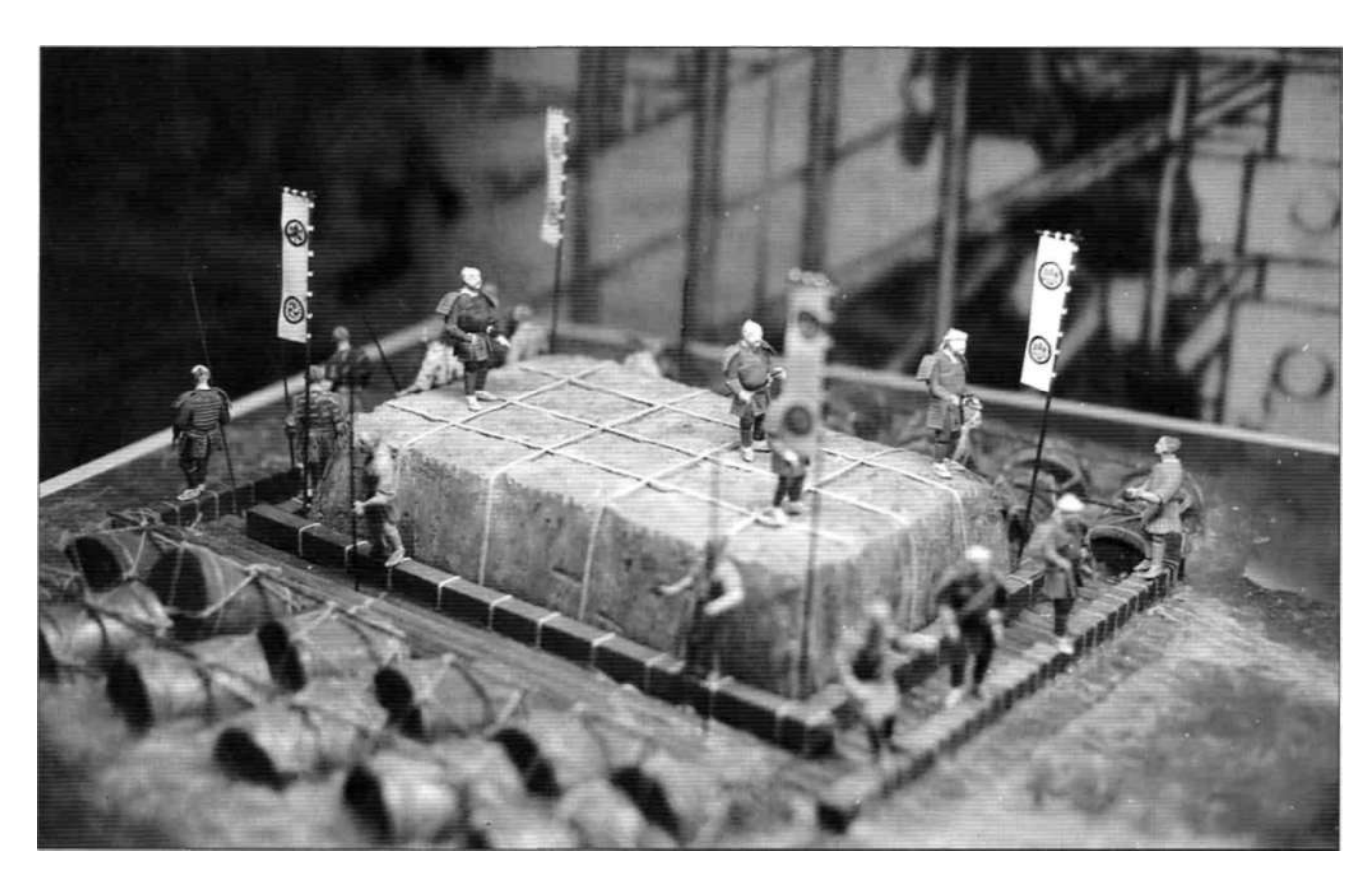
This model at Nagahama castle shows several of the stages than went into the building of a castle, from the cladding of the excavated hillside in stone to the raising of the keep. Note the workmen on their cradle platform, and the large stone being wheeled up on a cart.

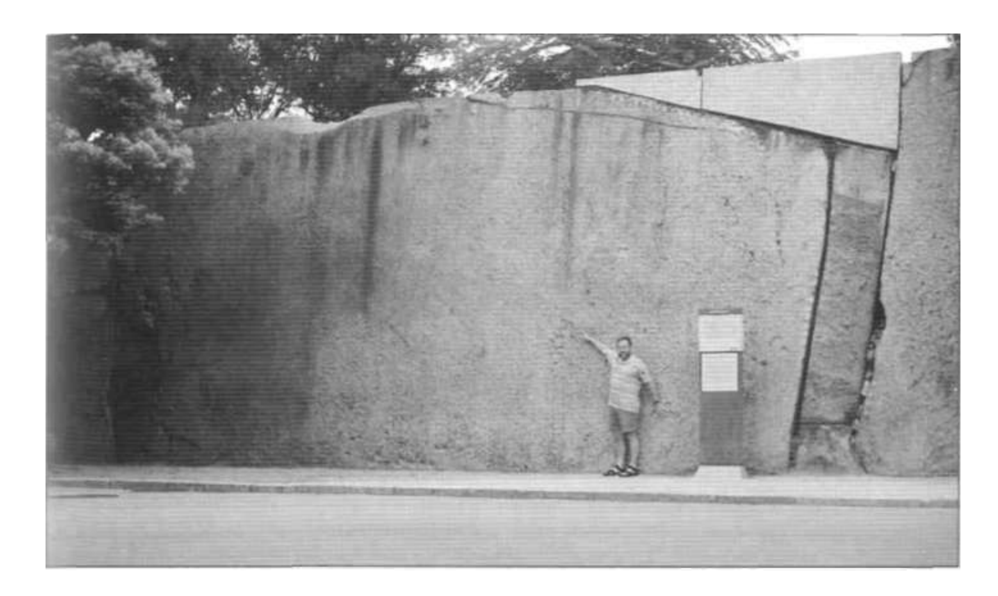
After this the labourers took over, and under the guidance of supervisors, who would work from the architect's plans and sometimes even from a relief model, the colossal and labour-intensive business of carving up a mountain would begin. Although the technical term for dividing up the castle site was 'marking by ropes', it was stout timbers that provided the lines for the workmen to keep to. After some preliminary ground breaking, a nearly vertical groove would be dug into the hillside to provide the first guideline. The actual line that the outer surface of the final stone wall would follow was provided by a long length of timber projecting parallel to the earth line and about three feet away from it, secured into the position by projecting wooden stakes. About 12 yards further along a similar guideline would be erected. Excavation would then continue between the two markers, which would be joined by other poles horizontal to the ground when the shape was complete. The result would be that one section of the castle was beginning to take its roughly final shape, surrounded by this guidance frame that looked like open wooden scaffolding. In the case of high wall sections different horizontal levels would be staggered. Great care was taken to produce as near perfect an outer surface as was possible, and if there was any danger of collapse the earth surface would be sheathed in wood.

The labourers who worked on the excavation had two main tools, one for digging, an implement resembling an adze, and baskets slung on a pole between the shoulders of two men for carrying away the soil. Because of the danger of rain bringing the fresh excavations down, the next stage, that of adding the stone, was begun before all the site had been carved, so a developing castle site would have shown nearly every successive process in action at any moment.

The delivery to the site of the ordinary building stones (as distinct from the 'ceremonial' donated ones described below) was accomplished by various means depending on their size. Two men would carry smaller ones slung from a pole. Bigger ones would be taken on a two-wheeled cart with two men pushing and two others pulling. Oxen would pull carts for even larger varieties.

One colourful feature of the process of building the largest and most prestigious edifices concerned the transportation to the site of huge individual stones that were to be incorporated into the walls. In this model at Hyogo Prefectural Museum a stone ornamented with Hideyoshi's flags is floated down river on a raft.





The great stone of Osaka castle, incorporated into the walls, shown with the author standing in front of it for scale.

When the stones began to be added to the carved surface the guide poles mentioned above came into their own to provide the target line for the finished product. Careful preparation began at the base of the section under construction. A timber base provided the exact angle for laying the bottom line of stones. The crucial one was the extra-large *ne ishi* or root stone. This would have its top and bottom surfaces precisely worked to launch the correct angle for the chosen slope - the higher the wall, the lower the angle. Behind the root stone was a layer of compacted smaller stones, and behind them a layer of pebbles pressed into the shaped earth core. From then on wall-building was a matter of adding height to this sandwich of stones and pebbles until the top of the wall was reached. Particular care was taken over external corners, where the specially shaped corner stones 'dovetailed'.

As the wall progressed upwards structures were put in place for delivering materials to the builders, either by wooden ramps from below, or by lowering baskets of stone from above. The workmen toiled on top of wooden platforms laid along the ever increasing upper surface of the wall. The smaller stones were pounded into a compact mass using wooden drivers.

The placing of the outer layer of stones required much effort and great precision, particularly when the largest stones were added. One colourful feature of the process of building the largest and most prestigious edifices concerned the transportation to the site of huge individual stones that were to be incorporated into the walls. In cases such as the building of Hideyoshi's Osaka castle the *daimyo* vied with each other as to who could donate the largest stone. The arrival of these monsters at the site was always a source of celebration, and numerous contemporary illustrations depict some massive piece of rock being dragged on a sledge, or towed along on a barge. The stone would be festooned with banners and religious objects as if it were a portable shrine in a religious festival. The labourers heaved on the ropes while small boys balanced on top of the stone waved fans and led the rhythmic chanting. One colossal stone at Nagoya castle has an outside surface area of 54 square feet, and was donated by Kato Kiyomasa. The huge stones of Osaka still provide a tourist attraction today, but recent excavations have revealed that some of these giants are not all that they appear to be. One, which is thirty feet long and ten feet high, turns out to be only about two feet thick!

Once the stone base was complete a very different building process would begin to raise the superstructure of the small walls, the gatehouses, side towers and above all the keep. Here the key material was wood, and the amazing skills of the Japanese carpenter who could build pagodas and temples came into its own. Within a scaffolding constructed from long wooden poles, a huge timber

framework would take shape. The vertical sections were sunk deep into the untouched core of the original hill, where they rested upon massive rocks placed there as foundations. Plaster was applied to the coarse framework between the pillars to give the outer surface to the buildings in a similar way to the building of the low plaster walls already described. Alternatively, in the case of the 'black castles' of Kumamoto and Matsue, the external surface would be of painted wood. Tiling, decoration and gilding, topped off with the traditional golden *shachi,* were the final stages used to produce the external appearance of the mighty edifice. Such were the human and financial resources available to a *daimyo* that the whole process from excavation to completion could take a surprisingly short space of time. Nagoya castle, for example, was completed for the Tokugawa *shogun* after only two years.

The principles of defence

Whatever their aesthetic appeal, Japanese castles were primarily fortresses, and the Japanese castle represented a sophisticated defence system, even if the way this operated is not always directly apparent. At first sight the graceful superstructures look flimsy and very vulnerable to fire, but they were in fact highly fire resistant, and the Japanese also lacked the means for effective artillery bombardment until quite late in their history.

One obvious disadvantage provided by the gently sloping and curved walls of the typical castle stone base was the ease with which attackers could climb them, and the way in which the unmortared blocks of stone fitted together also provided numerous handholds. One solution was the incorporation into the design of towers of the stone-dropping holes noted above which were akin to European machicolations. Unlike machicolations, however, the *ishi otoshi* were closed by hinged doors. An additional deterrent to would-be climbers were rows of spikes pointing downwards from certain horizontal surfaces such as is seen on the keep at Kumamoto castle and the small walls at Nagoya.

Whereas the primary consideration behind the European angle bastion was protection against artillery fire, this was only one factor taken into consideration in Japan, even though the two styles look superficially similar. In Japan an infantry attack or mining were far more likely to occur than an artillery bombardment, and it is only at the siege of Osaka in 1614/15 that anything resembling a European cannon bombardment becomes a major feature. In this case guns of European manufacture supplied the bombardment, so for this reason alone no Japanese castle can be regarded as an artillery fortress by design. There are no gun emplacements or casemates as such, and there would be few places inside Himeji, for example, where cannon could be mounted successfully. Instead the most common gunpowder weapons would be thousands of arquebuses with which an attacker or defender would sweep his opponent's lines. This was the technique that won the Korean castles for the invaders of 1592, an invasion army, incidentally, that took almost nothing in the way of an artillery train with it.

One subtle addition to the defences of the keep at Kumamoto was the rows of spikes like these to stop an assailant from climbing in.





The dramatic 'hairpin bend' at Himeji found on the approach to Gate 'Ha'. The keep looks tantalisingly close in the background.

Mining and countermining

A few attacks on a castle by mining will be illustrated in the 'operational history' section that follows, but there appears to be no evidence of permanent counter-mining measures being introduced, as was often the case in Europe. Attacks by flooding were also something that could not be adequately prepared for apart from choosing high ground on which to build one's castle. The great flooding sieges of Japan, Takamatsu, Ota and Oishi, all made use of very large-scale civil engineering works to create dykes and divert rivers, followed by immense patience as the waters rose, and there was little the defenders could do other than attack the workmen. Many castles would have had moats wide enough to cope with rising water levels, however, although whether the threat of flooding was the reason they were built is hard to discern.

Catapult bombardment

As noted earlier, bombardment from gunpowder weapons was never a major consideration in defensive planning for a Japanese castle until the very end of the period under discussion. Its primitive cousin, bombardment by crossbows and catapults, has a much longer history, but accounts of their use in Japan are sparse. Both forms of missile weapons seem to have been used during sieges, primarily as anti-personnel weapons and secondarily as incendiary deliverers, with wall-breaking only a minor consideration. Crossbows passed out of use late in the 12th century. The catapults used were Chinese-style traction trebuchets, and in fact the best account of their use, which dates horn 1468, describes them throwing soft-cased exploding bombs not against a *yamashiro's* castle walls but against the samurai defending the rudimentary palisades set up during the Onin War. Traction trebuchets appear in a clearly defensive role for a castle when the Mori family attacked Takiyama castle and were met by smooth river stones loosed from catapults. As late as 1614 traction trebuchets armed with soft-cased bombs were to be found on the walls of Osaka castle.

The living site

Daily life in the castle in peacetime

The castle was the centre of a *daimyo's* territory in more ways than one. The population may have depended upon the castle for their defence during wartime, but during peacetime the *daimyo* depended upon the population to grow food for the army, for providing a supply of recruits who would act as part time soldiers summoned in times of emergency, and also for castle maintenance. Apart from agricultural work, this was probably the greatest contribution made in peacetime by an individual peasant to the *daimyo's* cause.

Big or small, all castles had to be maintained and many fascinating records have survived of the process. For example, in 1587 Hojo Ujikuni ordered a certain Chichibu Magojiro, the commander of a company associated with Hachigata castle, to maintain a 174 *ken* stretch of walls, plus one tower and three gates in that section. At four labourers per *ken,* the Chichibu contingent had to supply about 700 men to work on the walls of Hachigata. The rules were strict. If the man was a part time soldier who was away on campaign, his wife and maidservants had to come and make repairs. When the damage was due to a typhoon, they had to move immediately to make the repairs, and if the damage was to the gates, tower or embankments of the castle, they had to repair the castle first, even if their own homes had been destroyed. The *daimyo's* needs always came first.

As well as repair, walls also had to be monitored as to their condition, and the area allocated to a particular company had to be policed and inspected once a month. The rope joints on the walls had to be fixed and frayed knots



Waxworks inside one of the towers of Himeji showing the *daimyo* HondaTadamasa (1575-1631) in a typical domestic scene.

repaired during the last four days of every month, a time set aside specifically for this purpose. When the work was completed, it had to be reported to Hojo Ujikuni, and if he was away from the castle for any reason, it had to be reported to the appointed official. If a single person failed to perform his duty, a punishment was imposed on the whole company. Care had to be taken regarding the materials used for castle repair, and the members of the company itself had to make sure that any additional labourers they brought along with them used the right materials and were not negligent.

The villagers thus impressed worked from the drum of dawn to the bell of evening, both signals being given from the castle tower. An earlier note, from 1563, spells out in more detail the schedule of repair. Barring typhoons, the walls were to be repaired every five years, at four persons per *ken* per day. The villagers had to bring with them at their own expense 5 large posts, 15 small posts, 10 bamboo poles, 10 bundles of bamboo, 30 coils of rope, and 20 bundles of reed. The instructions were as follows:

> At intervals of one *ken* on top of the earthworks drive in the large wooden posts. Place two bamboo poles sideways between them, and arrange four bundles of bamboo on top using the small posts, fastened by six coils of rope and then thatched with the reeds.

These walls were coated with the mixture of red clay and rock noted earlier. Some castle walls were tiled above, rather than thatched, and the plaster finish could be given a top coat of white, giving the Japanese castle its characteristic graceful appearance.

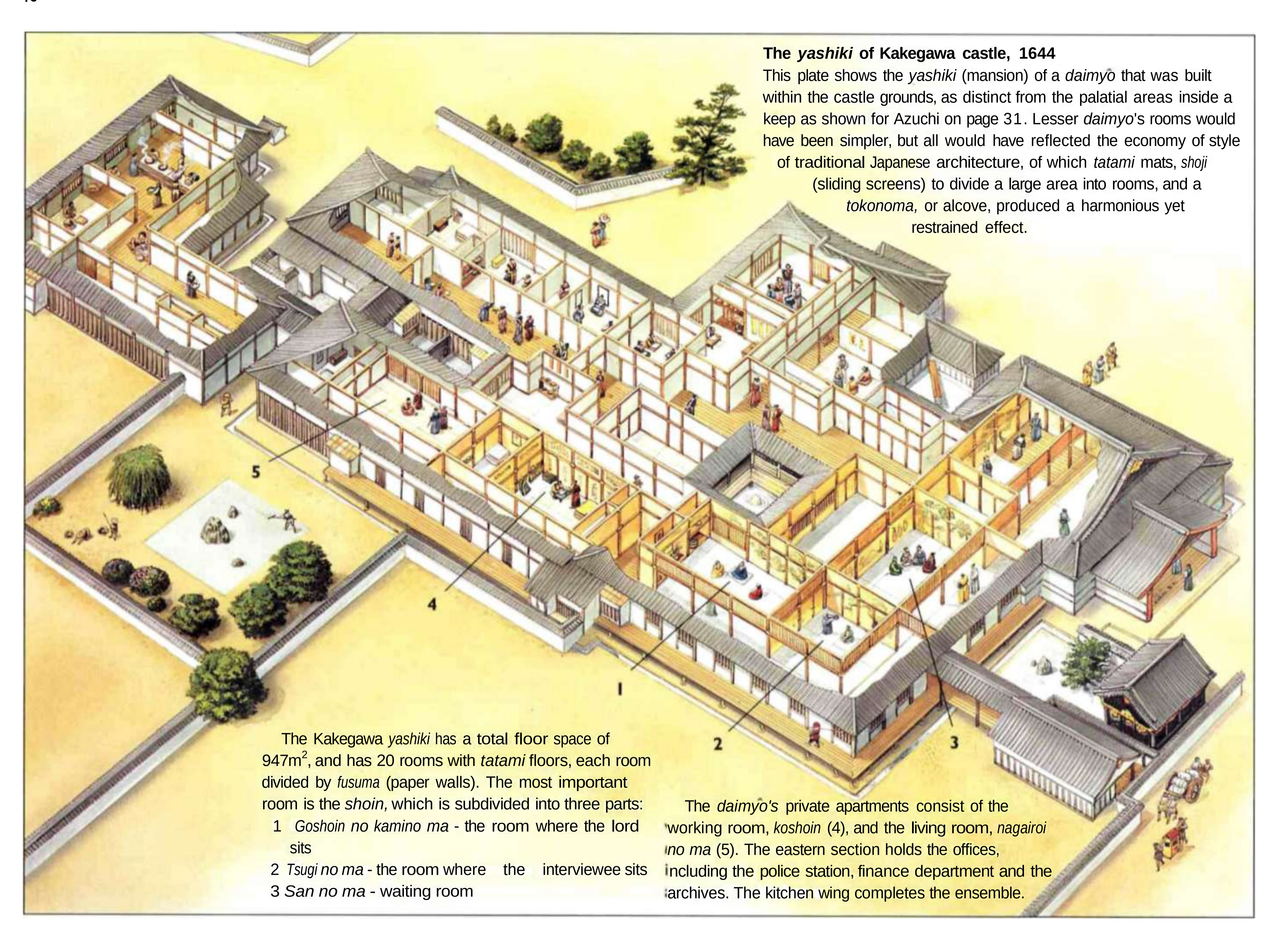
The castle garrison in peacetime

The defence of a castle, of course, relied on more than stout, well-maintained walls. The men of the garrison were vital. Depending upon the size of the castle, the garrison could be permanent, rotated, or kept as a skeleton force. For example, the Arakawa company, located a few miles from Hachigata castle, were ordered to run to the castle when they heard the conch shell trumpet sounding an attack. An order from 1564 relating to Hachigata has been preserved, which requires the leaders of 'company number three', consisting of 13 horsemen and 38 on foot, to relieve 'company number 2' and serve 15 days garrison duty.

Garrison life in a samurai castle was a matter of constant readiness, with its own, sometimes boring routine. The Hojo had a strict system for the samurai of mighty Odawara. In 1575 they were required to muster at their designated wall prior to morning reveille. When the drum beat indicated the dawn they would open the gates in their sector to the town outside. Guard duty lasted for six hours during the day, with a two-hour break. The gates would be closed at dusk when the evening bell tolled. Guards were mounted at night, and had strict instructions not to trample on the earth walls. When off duty their armour and weapons were stored at their duty stations, but guards were posted in the towers day and night, and the utmost care was taken at night to prevent fires and to guard against night attack. Troops were not allowed to leave the castle for unauthorised reasons, and if someone did leave, he would probably be executed and the person in charge severely punished. In 1581 the Hojo orders for Hamaiba castle included some important considerations of hygiene and safety. Human excrement and horse manure had to be taken out of the castle every day and deposited at least one arrow's flight away.

The castle as palace

In the discussion above relating to the design elements of the typical Japanese castle no mention was made of those parts of the castle set aside for ceremonial functions. This is partly because few of these buildings have survived, but the



The *yashiki* of Kakegawa castle, 1644

This plate shows the *yashiki* (mansion) of a *daimyō* that was built within the castle grounds, as distinct from the palatial areas inside a keep as shown for Azuchi on page 31. Lesser *daimyo*'s rooms would have been simpler, but all would have reflected the economy of style of traditional Japanese architecture, of which *tatami* mats, *shoji* (sliding screens) to divide a large area into rooms, and a *tokonoma,* or alcove, produced a harmonious yet restrained effect.

The Kakegawa *yashiki* has a total floor space of 947m², and has 20 rooms with *tatami* floors, each room divided by *fusuma* (paper walls). The most important room is the *shoin,* which is subdivided into three parts:

1 *Goshoin no kamino ma* - the room where the lord sits
2 *Tsugi no ma* - the room where the interviewee sits
3 *San no ma* - waiting room

The *daimyō's* private apartments consist of the working room, *koshoin* (4), and the living room, *nagairoi no ma* (5). The eastern section holds the offices, including the police station, finance department and the archives. The kitchen wing completes the ensemble.



A view of the *yashiki* (mansion) of Kakegawa castle seen from the keep of the castle.

topic must now be covered in detail because there are many records of castles being used to entertain ambassadors and for high-level meetings. In this context, possibly the most elevated use of a castle as palace was when Toyotomi Hideyoshi entertained the emperor of Japan with a tea ceremony in the gold-plated tea room of Fushimi castle.

In many cases the 'palatial' areas of the castle were located in the keep, but this depended on to what extent the keep was designed for purely military purposes. For example, when Oda Nobunaga moved his capital to Gifu, as he renamed the recently captured Inabayama in 1564, all his domestic and administrative buildings were located at the foot of the high mountain upon which the purely military keep was located. By the time of the building of Azuchi in 1576, however, the military and the civic function of the castle had merged, so that Azuchi showed Nobunaga as both general and prince at the same time. This principle was emulated by Hideyoshi at Osaka, but at Osaka there were in addition some splendid reception rooms in the grounds.

A word that is frequently encountered in the context of the more domestic buildings of a castle is *yashiki.* It can be translated as 'mansion', and shows an evolution of styles comparable to the castle itself. At the time of the Onin War the rival *daimyo* lived in Kyoto in their own *yashiki,* all of which perished in the conflagrations that followed. From this time on a *daimyo's* headquarters tended to be a well-defended castle, but the notion of a mansion lived on with those who felt most secure. Eventually, *yashiki* were to be found within the walls of the great castle complexes and castle towns. A very good surviving example is the Toda *yashiki* in Iga Ueno, which lies in an area of the town that was once



A very good surviving example of a *yashiki* is the building which acted as the clan school for the Toda *daimyo* in Iga Ueno. It lies in an area of the town that was once within the outerworks of Iga Ueno castle. Here we see the main building looking across the pond in the garden.

within the outerworks of Iga Ueno castle. Within the Toda *yashiki* we can see the kitchens and bathhouse along with reception rooms. When the *daimyo's* families were required to reside in Edo (a security measure introduced by the Tokugawa) numerous *yashiki* were created within the city, the distance of his dwelling from the keep being inversely proportional to the rank of the retainer.

Uniquely in Japan, at Nijo castle in Kyoto it is the military keep that has disappeared while the palace has survived. In other places we know about the design of the greatest *yashiki* because rooms from other castles have been removed and preserved elsewhere. Fushimi castle had outstanding reception rooms, some of which may now be found in the Nishi Honganji temple in Kyoto. Otherwise we can glean much information about *yashiki*, and reception rooms in castles generally, from the descriptions of European visitors, who were received in these surroundings by great men such as Nobunaga and Hideyoshi. For example, Luis Frois visited Gifu and wrote that 'of all the palaces and houses I have seen in Portugal, India and Japan, there has been nothing to compare with this as regards luxury, wealth and cleanliness'. The long description that follows lists the reception rooms and gardens that made up Nobunaga's palace at the foot of the mountain on which sat the purely military keep. When Frois visited in turn Azuchi castle he was able to see the same degree of ostentation within a castle keep. He mentions the lavish use of gold, and the whole thing was 'beautiful, excellent and brilliant'. He also did not fail to notice the strength of the stone bases, and, like other visitors to Edo and Osaka, was most impressed by the strength of the gates.

Rodrigo de Vivero y Velsaco had an audience with Tokugawa Hidetada, the second Tokugawa *shogun*, at Edo castle in 1609, and described the first room he entered as follows:

> On the floor they have what is called *tatami*, a sort of beautiful matting trimmed with cloth of gold, satin and velvet, embroidered with many gold

> flowers. These mats are square like a small table and fit together so well that their appearance is most pleasing. The walls and ceiling are covered with wooden panelling and decorated with various paintings of hunting scenes, done in gold, silver and other colours, so that the wood itself is not visible.

Lesser *daimyo's* rooms would of course have been simpler, but all would have reflected the economy of style of traditional Japanese architecture, characterised by the use of *tatami* mats, *shoji* (sliding screens) to divide a large area into rooms, and a *tokonoma* or alcove.

The preparation for war

When war began the daily lives of its garrison and the local population changed rapidly as the castle was converted into an active military headquarters. The *Ou Eikei Gunki,* a chronicle that deals with wars in the north of Japan, describes the extra preparations a garrison had to make when threatened with a siege. The following descriptions occur in the section that describes the defence of Hataya Castle in 1600 by Eguchi Gohei. Note how the castle is prepared for assault, which the attackers then convert into a siege when the attack is resisted.

> One of Yoshiaki's retainers called Eguchi Gohei kept the castle of Hataya, on the Yonezawa road. When he heard of the treacherous gathering at Aizu, he immediately replastered the wall and deepened the ditch, piled up palisades, arrows and rice, and waited for the attack ... The vanguard were under the command of Kurogane Sonza'emonnojo, with 200-300 horsemen. He

The main hall of theToda *yashiki* in Iga Ueno. showing the classic simplicity of style found in Japanese architecture in buildings both great and small.



sounded the conch and the bell to signal the assault. As those in Hataya were approached by the enemy they attacked them vigorously with bows and guns. Seventy of the enemy were killed in one go, and many were wounded. The deaths led to a change of plan, and the army who had tried to take the castle came to a halt.

Food and water

The state of a castle's food supplies was crucial when it was about to be besieged, or when such a prospect seemed likely following a enemy incursion. In 1587 Hojo Ujikuni ordered the village of Kitadani in Kozuke province to collect and deposit all grain from the autumn harvest in his satellite castle of Minowa. The value placed on provisions is also given dramatic illustration by another order from Ujikuni issued in 1568, the same year that Takeda Shingen invaded western Kanto, that no supplies were to be moved without a document bearing the seal of the Hojo. Should anything be moved without the seal then the offender would be crucified. Such draconian measures were justified because the threat of starvation could seal a castle's fate. After a 200-day siege in 1581 the defenders of Tottori were almost reduced to cannibalism. The strangest device for combating starvation may be found at Kato Kiyomasa's Kumamoto castle. Not only did he plant nut trees within the baileys, but the straw *tatami* mats that are to be found in every Japanese dwelling were stuffed not with rice straw but with dried vegetable stalks, so that if the garrison were really desperate they could eat the floor.

A reliable water supply was also vital during a siege. The sixth chapter of the *Taiheiki,* concerning the siege of Akasaka in 1331, tells of how 282 warriors in the castle came out to surrender, because they knew they would die the following day because they could not support their thirst for water. If a besieging army could locate the source of a garrison's water supply and destroy

Interiors of a keep are difficult to photograph adequately, but this corner inside Matsumoto shows several typical features. Note how there is a corridor running round the edge.The floor in the centre would be Fitted with interlocking *tatarni* mats.There are two gun ports at the apex of the corner, and two rectangular windows.



it they acquired a tremendous advantage. During the siege of Chokoji castle in 1570 a decisive moment was reached when the besiegers succeeded in cutting the aqueduct that supplied the garrison. All the defenders then had left were the meagre supplies stored in huge storage jars. This led to the celebrated incident when Shibata Katsuie smashed the jars and led his men out in a desperate assault that actually won the battle for them. The *Zohyo Monogatari* further notes that:

> During sieges on a *yamashiro* when there is no further water the throat becomes parched and death can result. Water rationing must be carried out, to a measure of one *sho* per person per day.

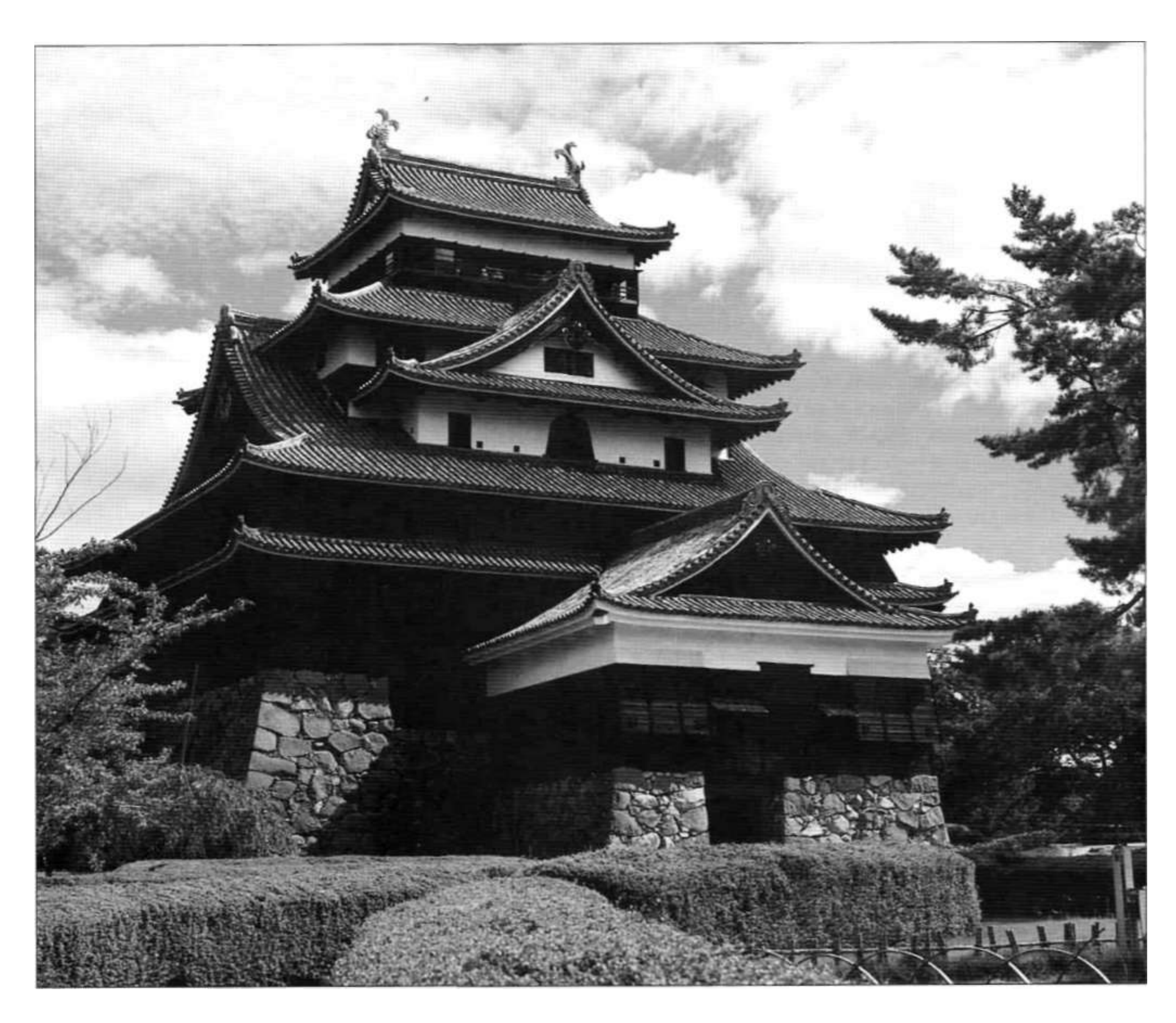
In two of the Takeda campaigns the water supply played a crucial role. At Futamata in 1572 the castle obtained its water by lowering buckets from a wooden tower built high above the neighbouring river. Takeda Katsuyori constructed heavy wooden rafts and floated them downstream to crash into the supports of the tower, which eventually collapsed. At Noda in 1573 miners tunnelled into the side of the castle's moat and drained off all its water.

Psychological pressures

The numbers of people within a castle were swelled by farmers and others moving in for safety when an attack was imminent, and this could stretch the garrison's resources and provisions to their limits. When Takeda Shingen invaded the Kanto in 1569 the local people flocked to Odawara, causing severe pressure on resources. During Hideyoshi's invasion of the Hojo territories a much larger movement of population took place, and the garrisons of nearly all the Hojo satellite castles were stripped to the bare minimum while most troops were packed into Odawara. Hojo Ujikuni's Hachigata castle was the sole exception, and came under concerted attack. Hideyoshi's support forces under Uesugi Kagekatsu and Maeda Toshiie spread 35,000 troops round Hachigata, and after a month-long siege Ujikuni surrendered, thus providing a foretaste of what was to come at Odawara. Starvation was but one of the weapons Hideyoshi employed at Odawara, and to drive the point home the besiegers created a town of their own around the walls, where they feasted loudly within sight of the defenders.

While the garrison of a castle were preparing for a siege, the attacker would be similarly organising his forces and engaging in political negotiations that could result in a bloodless victory. This was far from uncommon, and a good example occurs during Toyotomi Hideyoshi's campaign against the Mori family on behalf of Oda Nobunaga. The first castle Hideyoshi had to face was Himeji, which was then called Himeyama. It lay where two key roads met. The castellan was a certain Kodera Yoshitaka, whose loyalties were somewhat unsure. Through the mediation of Kuroda Yoshitaka, Kodera's son-in-law, Kodera was persuaded to surrender Himeji without a shot being fired. With Himeji as a base Hideyoshi could then concentrate on capturing Miki castle, which was also in Harima province. It was held by Bessho Nagaharu, whom Hideyoshi wished to spare so that he might join the Toyotomi side as well. Hideyoshi wrote to Kodera Takatomo as follows:

> I am despatching Hiratsuka to you promptly, and order you to take stock of the situation and save the life of the lord of Miki. If you manage to isolate it completely, you can take Miki by cutting off supplies of food and water, for there have been many such occasions when the besieged have pleaded for their lives. After you have finished with Miki, please do not neglect to capture Gochaku and Shigata. You can take them either by starvation or by killing ... As far as [the lord of] Itami [Araki Murashige] is concerned, it seems to me he will be defeated in three or five days because you have filled the moat in so quickly.



The keep of Matsue castle, one of the best preserved of Japan's 'black castles'. Note in particular the extension of the stone base to form the walls of the entrance.

Not all the elements of Hideyoshi's carefully considered plans worked. He won Miki castle, but the castellan, Bessho Nagaharu, preferred to commit suicide rather than submit personally, and Araki Murashige, lord of Itami, managed to escape and rejoin the Mori.

When the matter came to an assault, an attack on a defended castle provided a samurai with opportunities for individual glory every bit as dramatic as a field battle. Siege work was less glamorous, but no less eventful, as the following section will demonstrate.

The operational history of Japanese castles

The operational history of Japanese castles is the story of the conflict and interplay between constantly improving methods of assault and new means of defence to counter them. This can be seen as siege warfare moves from crossbows against wooden towers, through traction trebuchets against the *yamashiro* complex, via stone-cladding and keeps, to the artillery bombardment at Osaka in 1615. Throughout samurai history the castle played a key role in warfare, and between 1570 and 1615 the theory that lay behind Japanese stone castles was tested to destruction.

Early *yamashiro* operations

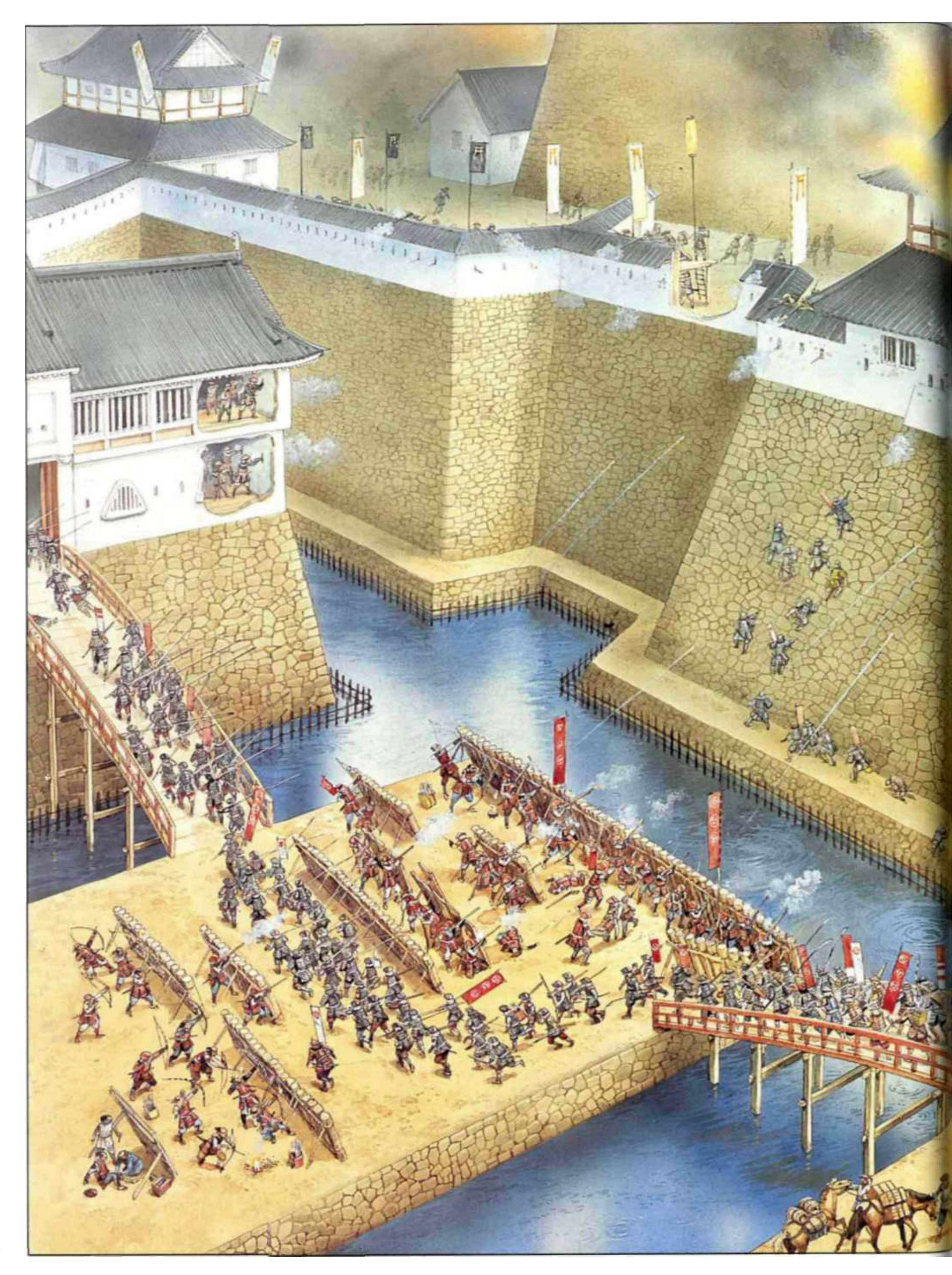
An example of an early *yamashiro* under siege is Hiuchi in 1183, defended by a moat created by a dam, which the attackers broke. Later in the same year a *hirajiro* called Fukuryuji, defended by a Taira supporter, was attacked by Imai Kanehira. The attack was an infantry assault under fire from bows and arrows. The famous Ichinotani was a stockade *hirajiro* with one side on the beach, which Minamoto Yoshitsune attacked from the rear in 1184 down a steep cliff. The year 1189 is the last date in which we read of crossbows being used in Japan.

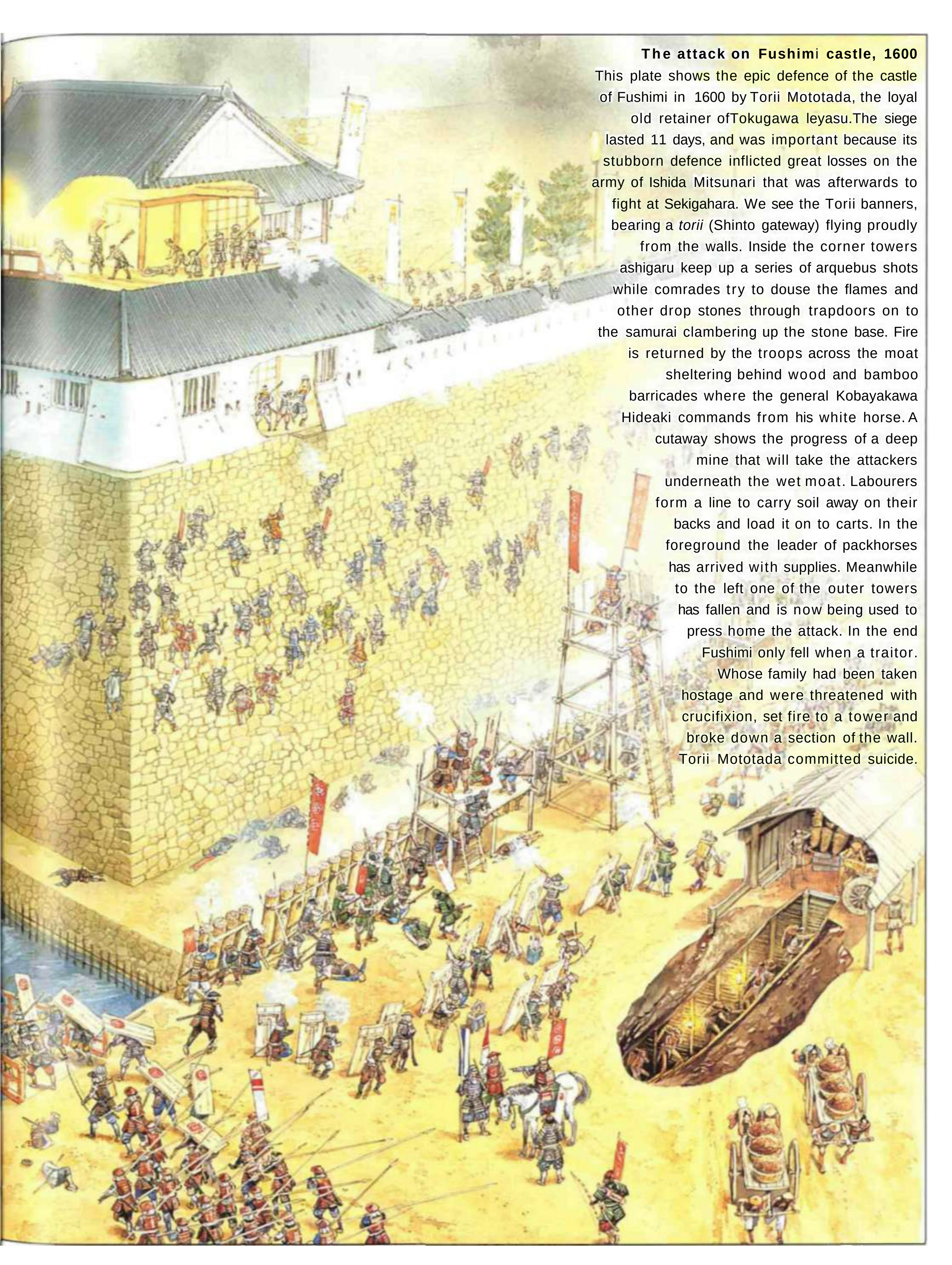
The best accounts of early *yamashiro* warfare refer to the Nanbokucho Wars of the 14th century, when Emperor Go Daigo attempted to reassert imperial power against the *shogun.* His revolt ended in failure, but was accompanied by much fighting in the mountains around Yoshino, where *yamashiro* provided bases. There are many accounts in the *Taiheiki* of surprise attacks by night, the use of dummy troops, collapsible bridges and the like.

Sengoku yamashiro operations

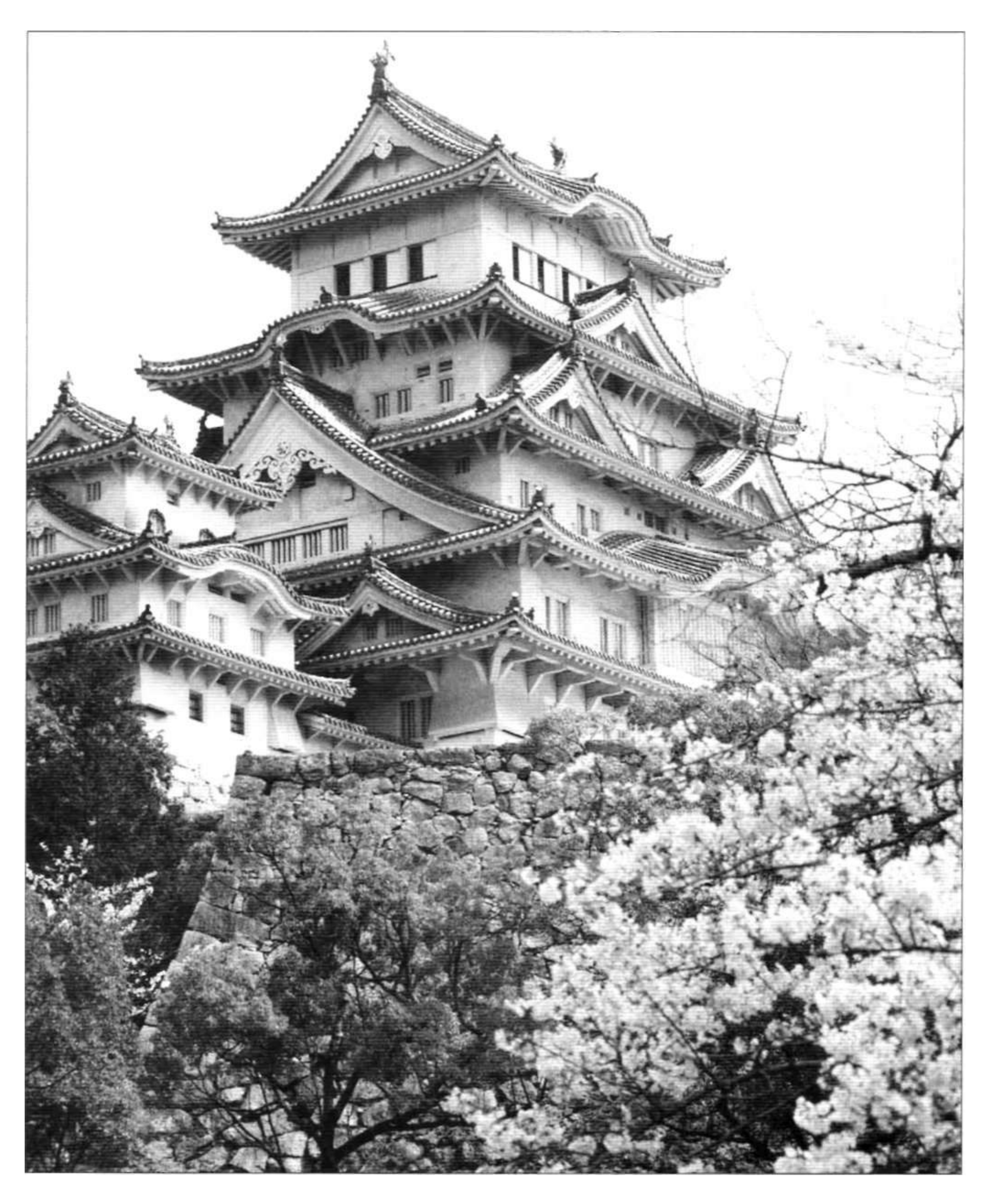
With the beginning of the Sengoku Period we note numerous sieges against the pre-stone model of *sengoku yamashiro.* Arai was taken by the Hojo in 1516 after a desperate fight to control the drawbridge which connected the two halves of this island fortress. It was during the siege of Un no uchi in 1536 that Takeda Shingen, then aged 15, had his first combat experience, taking the garrison by surprise after marching through thick snow. The following year the Hojo besieged the Uesugi castle of Musashi-Matsuyama, when the garrison tried to summon help from outside by sending a message through the siege lines attached to the collar of a dog. Psychological pressures on a garrison may be noted at the siege of Shika in 1547, where Takeda Shingen had the freshly severed heads of the victims of the battle of Odaihara displayed in front of the castle walls. In each of these cases we may envisage a castle layout similar to that shown on page 11, with carved hillsides, ditches and palisades.

Two years later, far away in the south of Japan, Kajiki castle was captured by samurai of the Shimazu using the newly acquired Portuguese arquebuses, a weapon that was to revolutionise Japanese warfare. When Oda Nobunaga attacked Muraki castle in 1554 he used a system of rotating volleys of arquebus fire from just across the moat, a pattern that was to become very common in Japanese siege warfare, and was used to tremendous effect from field fortifications at the famous battle of Nagashino in 1575. But even the new arquebuses were not infallible, and the castle of Moji, which occupied a prominent vantage point overlooking the straits of Shimonoseki, changed hands five times between 1557 and 1561 in spite of gunfire, amphibious assault and even a bombardment from Portuguese ships. This was a unique event in





The attack on Fushimi castle, 1600
This plate shows the epic defence of the castle of Fushimi in 1600 by Torii Mototada, the loyal old retainer ofTokugawa leyasu.The siege lasted 11 days, and was important because its stubborn defence inflicted great losses on the army of Ishida Mitsunari that was afterwards to fight at Sekigahara. We see the Torii banners, bearing a *torii* (Shinto gateway) flying proudly from the walls. Inside the corner towers ashigaru keep up a series of arquebus shots while comrades try to douse the flames and other drop stones through trapdoors on to the samurai clambering up the stone base. Fire is returned by the troops across the moat sheltering behind wood and bamboo barricades where the general Kobayakawa Hideaki commands from his white horse. A cutaway shows the progress of a deep mine that will take the attackers underneath the wet moat. Labourers form a line to carry soil away on their backs and load it on to carts. In the foreground the leader of packhorses has arrived with supplies. Meanwhile to the left one of the outer towers has fallen and is now being used to press home the attack. In the end Fushimi only fell when a traitor. Whose family had been taken hostage and were threatened with crucifixion, set fire to a tower and broke down a section of the wall. Torii Mototada committed suicide.



The beautiful keep of Himeji castle seen among cherry blossom. Himeji is the most visited castle in Japan.

Japanese history, and so dramatic was the illustration of the devastating effects of cannon-balls against a predominantly wooden fortress that it is surprising that there was so little future development in this direction. The castle of Musashi-Matsuyama enters the story again in 1563 when Takeda Shingen used miners to collapse its walls. In 1564 Inabayama fell, but only as a result of a classic infantry assault up its steep hill.

Operations against castles of stone

Stone bases begin to play a part in castle warfare from about 1570 onwards. For the up-and-coming Oda Nobunaga, the decade was dominated by Japan's longest siege when he spent ten years, on and off, reducing the Ikko-ikki's formidable fortress cathedral of Ishiyama Honganji. This was a long and bitter campaign directed against a massive *hirajiro* complex of the latest style situated within a maze of reed beds and creeks. Supplies were run to them by sea courtesy of the Mori family, and the Ikko-ikki also had large numbers of arquebuses. Their satellite fortress of Nagashima also held out for years, and on one occasion an attacking army was caught by flooding from a broken dyke in a neat reversal of the conventional siege situation.

Midway through the Ishiyama Honganji operation there occurred the celebrated siege of Nagashino castle, which withstood several ingenious attempts to capture it, and was eventually relieved by the famous victory at the battle of Nagashino. This involved the mass use of arquebuses firing from behind field fortifications, and although the precise situation of Nagashino was never repeated, its influence can be seen in the temporary earthworks raised by both sides during the Komaki campaign of 1584. The result was stalemate, as neither side wished to repeat the mistake of Nagashino, and in fact the battle of Nagakute was fought several miles from the Komaki lines as much as a result of boredom as anything else. The 'trench system' of Komaki was never seen again in Japanese history as it just did not fit in with the samurai ethos, and the only use of earthworks in future was to augment a castle's stone walls.

Yet every new siege made fresh demands upon the ingenuity of both besiegers and besieged, and the early 1580s saw two very different actions against castles. In 1581 at Tottori, a *yamashiro* with formidable stone walls, the weapon of starvation was used on an unprecedented scale. Kikkawa Tsuneie held out for 200 days, and surrendered only to save his men from having to eat each other. At Shizugatake in 1583, however, the situation was totally different. Shizugatake was one of a chain of *sengoku yarnashiro* raised north of Lake Biwa by Toyotomi Hideyoshi to protect his communications with Kyoto. Little stone was used, and the means of attack adopted by Shibata Katsuie shows a very good understanding of the layout of a *sengoku yamashiro* complex, because instead of making a frontal assault on the most forward of the castles, he made his way along the connecting ridge to the rear, capturing one castle at a time and then using it as a base for the next attack. The strategy would have succeeded had Hideyoshi not mounted a surprise rescue operation by night, catching Shibata's general unprepared.

Several sieges were involved in Hideyoshi's invasion of Kyushu in 1586; the weapons used ranging from infantry assault to bribery and trickery. The Hojo's mighty Odawara castle saw the most theatrical siege in Japanese history in 1590, where the besiegers loudly proclaimed their wealth of wine, women and song to the miserable Hojo defenders cooped up inside.

With the Korean invasion of 1592 the Japanese came up against foreign castle styles and siege techniques for the first time in their history. At first everything went their way. Thousands of arquebuses swept the walls of the Korean fortresses and an assault followed, a pattern that cleared a path as far as Seoul within 20 days. But when the Koreans rallied and the Chinese crossed the border to assist them the Japanese army was thrown on to the defensive, and had to withstand attacks from within the chain of communications forts they had hastily erected. At Chinju in 1593, however, the Japanese showed that they were able to conduct siege warfare with the same skill as the Chinese when they undermined the fortified town's walls.

By the time of the second invasion in 1597 the only really secure Japanese possessions in Korea were the ring of coastal fortresses called *wajo*, which became the focus for sustained Chinese attacks. Ulsan was only half finished when it was subjected to human wave assaults in a celebrated winter siege



That ornate tower keeps already existed during the time of the civil wars of the 16th century is supported by the presence of such buildings on contemporary illustrations. This image is of Shizugatake castle, and appears on the Shizugatake Screen in Osaka castle. The actual buildings of this remote frontier fort would, however, have been less elaborate, and designs like this would have been found only in a *daimyos* more important castles.

where soldiers from both sides froze to death at their posts. Sunch'on was attacked by sea and land at the same time, the latter operation making use of weird and wonderful Chinese siege engines.

The lessons learned in Korea were applied back home in the design of several of the fortresses we see today, but on returning to Japan the samurai split into two camps for the succession dispute that culminated in the battle of Sekigahara in 1600. Several key sieges, including Ueda, Otsu and Fushimi, provided 'sideshows' for this decisive battle. Finally, at Osaka in 1614/15, European techniques of long-distance artillery bombardment made their first appearance.

Aftermath

The castle town

The years between the battle of Sekigahara and the siege of Osaka witnessed the most furious spate of castle-building and redevelopment in Japanese history. This was the beginning of what would become two and a half centuries of peace under the iron rule of the Tokugawa. One major element in their polity was the *baku-han* system, whereby national government was provided by the *bakufu* or Shogunate, and local government by the *daimyo's* fiefs or *han*. Like everything else in Tokugawa Japan, there were regulations governing the *daimyo's* castles, which became the focal point for local administration. Yet along with the rebuilding and redevelopment of provincial castles, many were destroyed under the policy of 'one province - one castle'. The result was that the mighty fortresses we see today became the centre of a *daimyo's* territory in a more decisive and defined way than ever before.

When wars ceased the castles also became the focus of the castle towns that had grown up beside them, and these in turn were to become the Japanese cities of today. Commerce flourished, particularly in Edo and Osaka, but tragedy struck many old castles in the mid-19th century. The influence of the *shogun* had long been declining in the face of western incursions, and there were moves afoot for the abolition of the Shogunate and the restoration of imperial power. Several rebellions broke out, consuming certain famous Japanese castles in their flames, and when the emperor was restored Japan looked to the future, not to the past. The castles became the symbols of an old-fashioned and discredited system that modern Japan had left behind. They also provided possible bases for rebellion, a fact brought home by the Satsuma Rebellion of 1870, which included a siege of Kumamoto castle. So in the desire to be modern and progressive many castles were demolished, and others were allowed to retain only their keeps.

The final phase of destruction happened during the bombing raids of the final year of World War II, when many castles along the Pacific Coastal area were lost forever. Castles in more remote areas such as Matsue and Matsumoto were untouched, but the overall destruction was considerable. Since then many-keeps have been rebuilt, some in reinforced concrete with varying results, others more authentically using the correct materials. The economic success of Japan during the latter half of the 20th century meant that funding was seldom a problem, and with the superb restoration work that has been done on such wonderful original specimens as Himeji and Hikone, the graceful Japanese castle may be enjoyed today as never before.

Japanese castles today

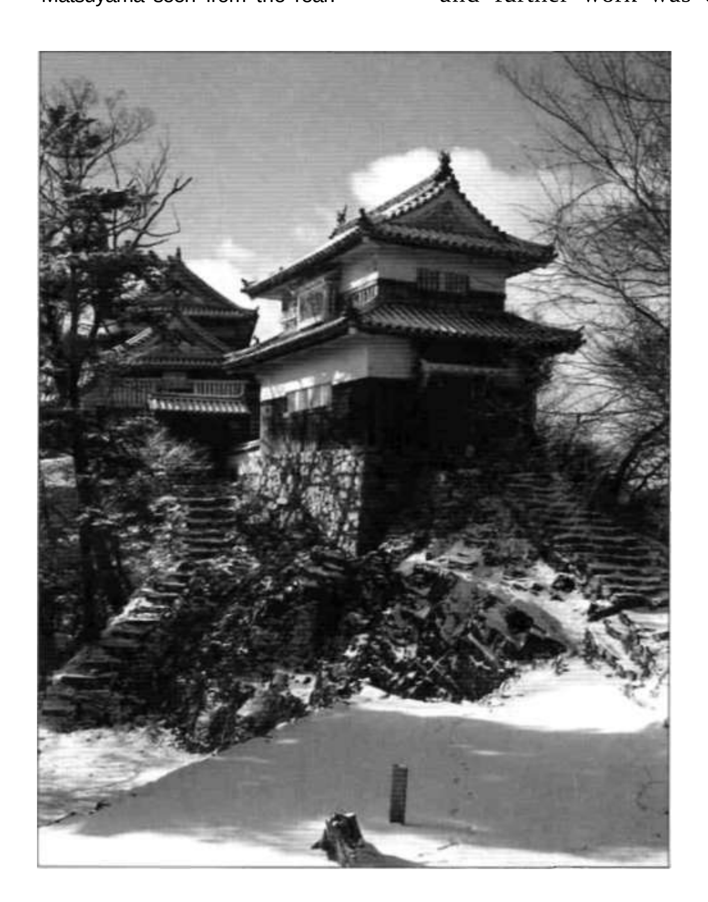
All the castles of the 'developed form' discussed in this volume are open to the public and accessible. The following list sketches in a few more extra details about the best sites. For precise locations, opening times, etc., the reader is referred to *Gateway to Japan* mentioned in the bibliography, or any other reliable guidebook.

Azuchi

Only a stone base remains of the great Azuchi castle, raised by Oda Nobunaga as one of the wonders of Japan, and burned to the ground when Nobunaga was assassinated only six years later. For this reason no one can be certain what Azuchi actually looked like, but the consensus of opinion is that this revolutionary building had seven storeys, of which the uppermost one was octagonal and richly decorated. Curiously, a reproduction Azuchi castle forms the centrepiece of the highly entertaining Ise Sengoku Village, a 'samurai theme park' near Ise.

Bitchu-Matsuyama

Bitchu-Matsuyama is the highest *yamashiro* in Japan, being located on top of Mount Gagyu at 1,400 feet above sea level. There was a simple fort on its summit as early as 1240, but the evolution of the present castle really dates to the Sengoku Period, when Mimura Motochika covered the top of the mountain in a *sengoku yamashiro* complex. In 1600 the Tokugawa Shogunate rebuilt it, and further work was done under its new lord, Mizunoya Katsutaka. Ruined during the Meiji Restoration, it has been superbly restored since 1929, and provides one of Japan's most spectacular castle sites. It is particularly beautiful under snow.



The snowbound keep of Bitchu-Matsuyama seen from the rear.

Edo

As the seat of the Tokugawa *shogun*, Edo was the most important castle in Japan at the time. It is now the imperial palace in Tokyo. Not that much of it can be seen by the public except for the outer walls and gates, which are enormously impressive on account of the vast areas of space enclosed within them. Its keep burned down during the great fire of 1657.

Fushimi

Fushimi castle has had a chequered history. It was first built in 1594 by Toyotomi Hideyoshi to allow him to dominate Kyoto, and was among his favourite residences. It was to be the meeting place with the Chinese ambassadors who were coming to negotiate an end to the Korean War, but an earthquake flattened most of the buildings in 1596. They were hastily rebuilt, and in 1600 Fushimi suffered one of the most celebrated sieges in Japanese history when Torii Mototada held it for the Tokugawa. In 1623 Fushimi was dismantled, and many of its finest buildings and interiors now form part of other castles and temples.

In 1964 it was 'rebuilt', if one can use that expression for the less than satisfying concrete reproduction that was raised on a nearby site, complete with recreational facilities. It nonetheless houses a very good museum devoted to the life and times of Toyotomi Hideyoshi.

Gifu

Gifu, formerly Inabayama, was Oda Nobunaga's headquarters, and is located on top of a mountain. The keep is a modern reconstruction, but as the town is at the foot of the mountain it gives a good impression of the relationship between castle town and fortress.

Hikone

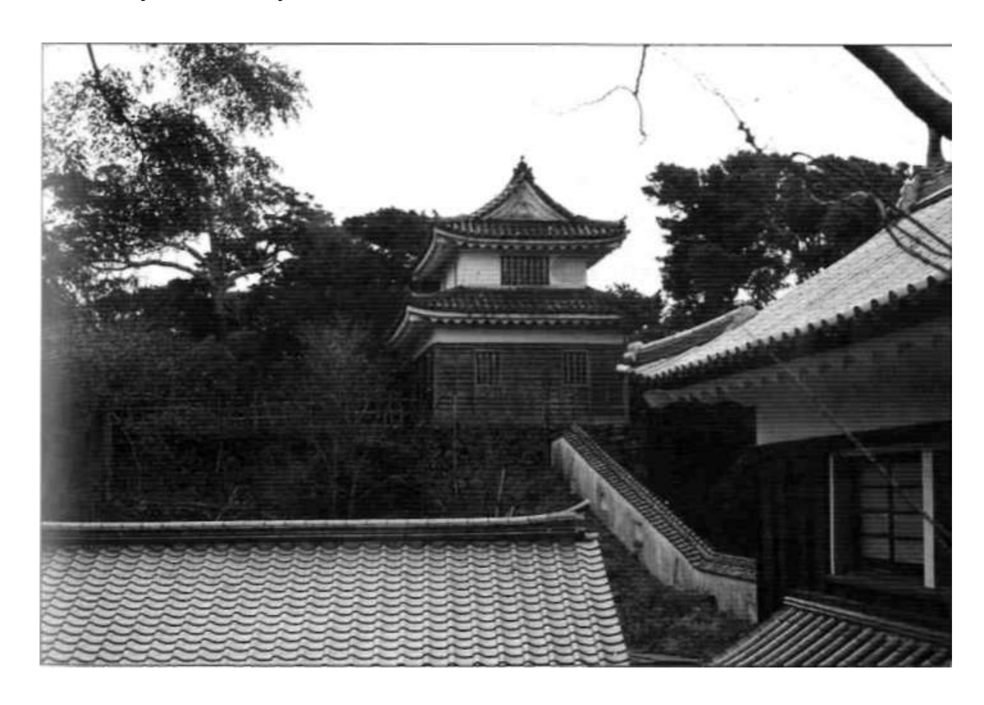
Hikone, near the shores of Lake Biwa, is one of Japan's best preserved and most interesting castles, and rivals Himeji in everything but size. The keep, built by the Ii family, is original, and is believed to have been moved to Hikone from Otsu, where it was erected in 1575. There are several other towers and gates in excellent repair. The castle museum houses the famous red-lacquered armour and other items belonging to the Ii *daimyo.*

Himeji

It visitors to Japan see only one castle during their stay then it is likely to be the photogenic Himeji, which lies conveniently on the main railway line to the west from Osaka. Fortunately for them, Himeji is one of the finest castles in existence, and provides an excellent 'castle experience'. The keep that we see today dates from Himeji's rebuilding in 1601 by Ikeda Terumasa, Ieyasu's son-in-law. The work took nine years, and somehow it has miraculously survived. All the features of a Japanese castle discussed in this book may be found in Himeji, from stone-dropping holes to weapon racks, making it deservedly the tourist attraction that it has become. The walk up to the keep via the tortuous succession of gates and walls (described on page 22) is an education in itself.

Hirado

Hirado castle, on the island of the same name, holds an attractive position looking down on the harbour. The keep has been restored, but all the stone walls are original. Nearby is the superb Matsuura Historical Museum, housed in the *daimyo's* former *yashiki.*



Some interesting features of a largely wooden corner tower and its adjoining small wall are shown here at Hirado.

Hirosaki

Hirosaki lies in the far north of Japan and has a very picturesque keep, well known for its views among cherry blossom. It was originally built in 1611, but was struck by lightning and left in ruins until being rebuilt in 1810.

Inuyama

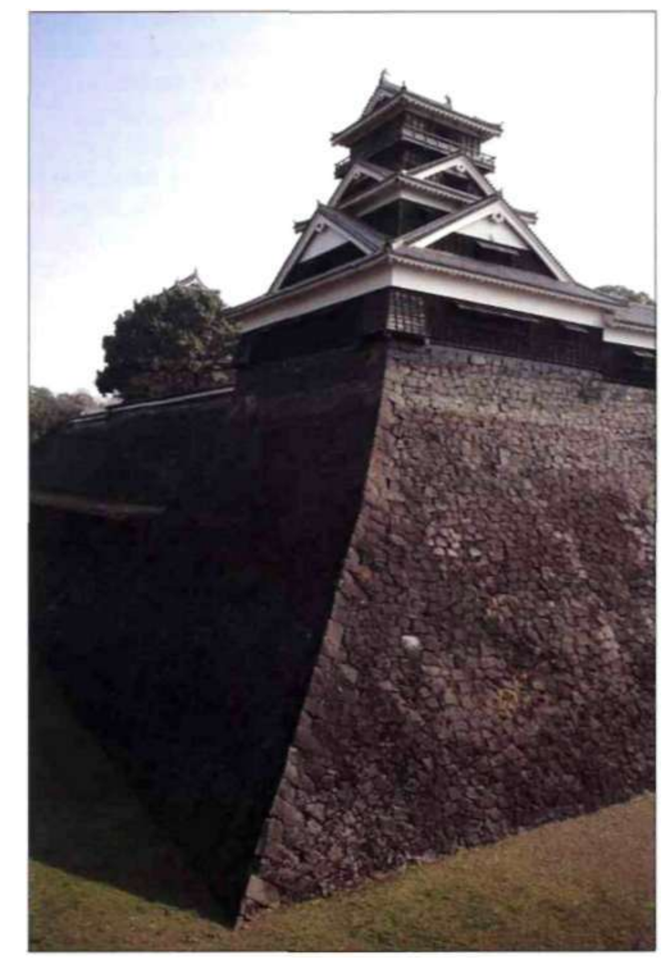
Inuyama ('dog mountain'), which dominates a wooded outcrop over the Kiso River (the 'Japan Rhine' to the tourist guides) north of Nagoya has one of the most romantic settings of any Japanese castles, although the immediate riverside view is now spoiled by modern accretions. It was originally established in 1537, and the present keep, which is one of the best surviving wooden originals left in Japan, was built by the Naruse *daimyo.* The Naruse family still own Inuyama castle, making it the only Japanese castle still in private hands. Its interior is most interesting as it accurately reflects life in a keep during the early 17th century. The *daimyo's* residential quarters are on the first floor. They are divided into four rooms in classic Japanese style, while round the outside of them is a polished wooden corridor called the *musha bashiri* or 'warrior's run', where guards could maintain a constant watch. The second floor was used for storing armour and weapons, while the third floor houses more private rooms. The fourth storey, which has an external balcony, offers clear views in all directions for many miles around.

Kakegawa

A welcome trend has in recent years been the rebuilding of Japanese castle keeps using the correct materials and based on the plans which the *daimyo* was required by law to keep. I shall never forget my surprise on turning up at



BELOW LEFT A drawing of the keep of Kakegawa that appears in the detailed plans of the castle that the *daimyo* was required by law to keep. The reconstruction of Kakegawa castle was based on these plans.



BELOW RIGHT Surely the finest combination of stone base and corner tower in Japan is the dramatic juxtaposition of the wall and the Uto tower at Kumamoto, which soars up from the dry moat.

Kakegawa castle in 1997 with an out-of-date guidebook expecting to find a stone mound, only to see the complete keep appear before my eyes! For this reason Kakegawa is well worth a visit, and is covered in detail on pages 15 and 42.

Kiyosu

Since the author's first visit to the site of Kiyosu castle in 1986, which is bisected by Japan's famous Bullet Train, the keep has been rebuilt a quarter of a mile away. On the original site there is a fine statue of Oda Nobunaga.

Kochi

Lying on the southern coast of Shikoku, Kochi does not receive as many visitors as it deserves. The keep was built in 1747 in exact imitation of the original that was destroyed by fire, and contains fascinating domestic apartments. From the outside it looks like a three-storey structure but it actually has six floors inside.

Kokura

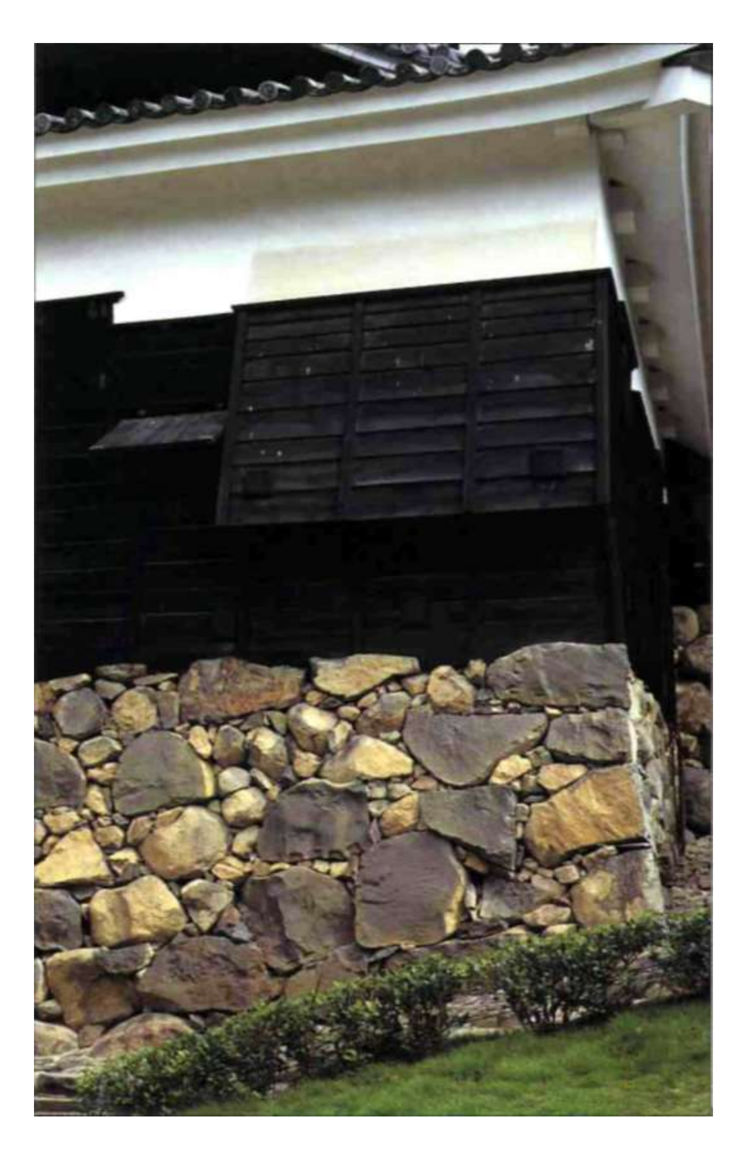
Kokura burned down during a fire in 1837. Parts of it were rebuilt in 1839, but it again suffered destruction in the turbulent times leading up to the Meiji Restoration. It has been rebuilt in modern times. Kokura was first created in 1602 by Hosokawa Tadaoki, and has a keep with the unusual feature of a fifth storey that is larger than the fourth.

Kumamoto

Kumamoto is one of Japan's largest and finest castles, and its combination of dark wood and white plaster make it look most attractive as a 'black and white' castle. It was built by Kato Kiyomasa, whose experience in the Korean War led him to incorporate into Kumamoto many of the lessons of siege craft that he learned the hard way at the hands of the Chinese army. Little details of food supply, such as 120 wells, nut trees in the courtyards and edible floor-matting, are not as apparent to the visitor as the stone-dropping holes and spikes on the keep, and above all the tremendous succession of massive stone bases built with pronounced curves. The present keep is a modern reconstruction, but the Uto tower in the northwest corner is an original. It was moved to Kumamoto from U to castle, where it formed the keep. The Uto tower lies on top of what is probably the most impressive stone base in Japan, which soars up from the moat. Also at Kumamoto is the superb 'long wall', which is made of wood and plaster and stretches for over half a mile in front of the Tsuboi River. Kumamoto's strength, and Kato Kiyomasa's insights, were tested and passed when Kumamoto fell under siege during the Satsuma Rebellion of 1870. During that war the castle was assaulted by modern weapons, yet still held out.

Maruoka

Maruoka has Japan's oldest surviving keep, built in 1576. It was damaged during an earthquake in 1948 but repaired and re-assembled. The roof tiles are of stone.



A section of the wall of the keep of Matsue castle, showing the stone base, the black-painted wooden section and the white plastered upper section. A small hinged window and a large stone-dropping hole can be seen within the black wooden section.

Matsue

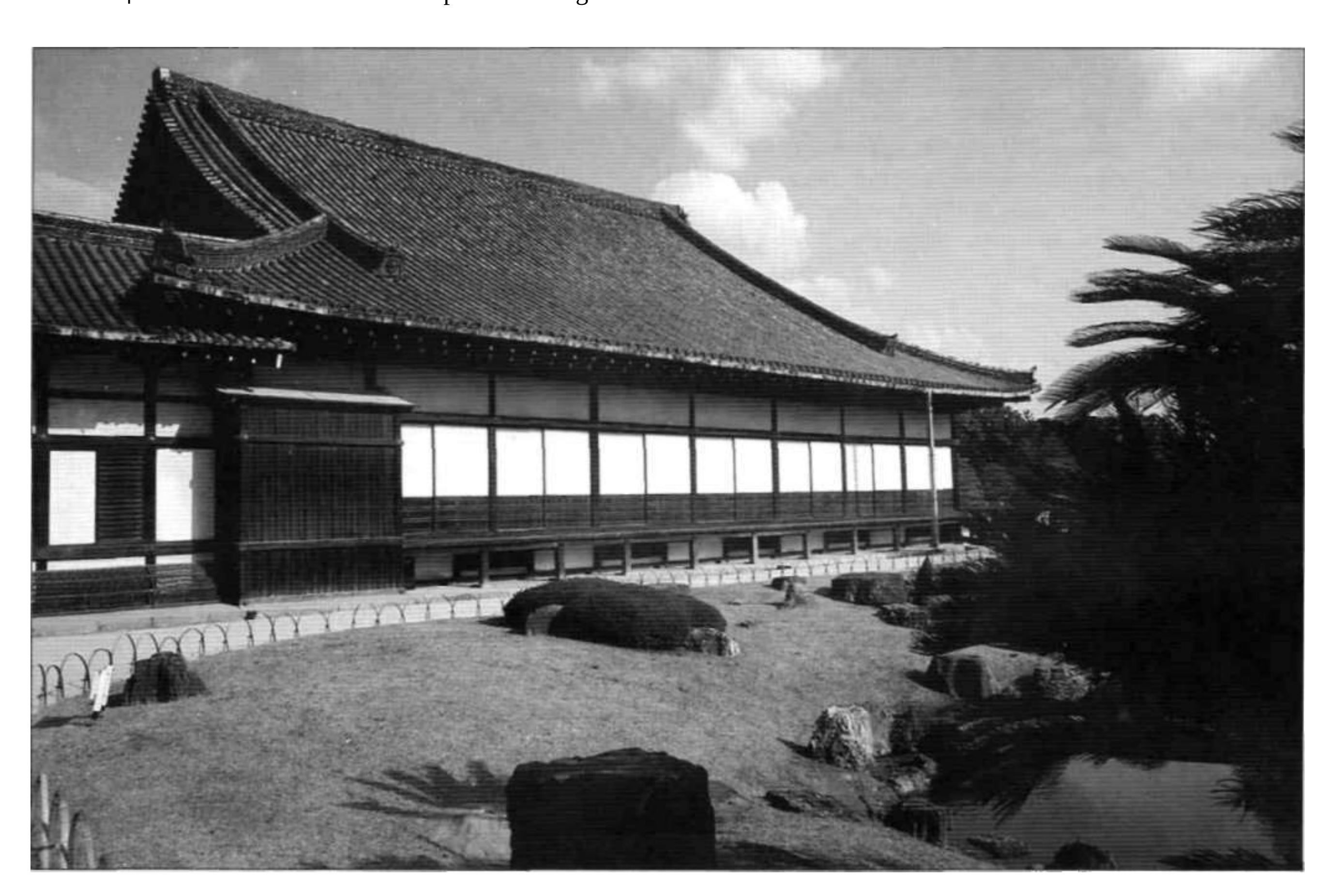
Matsue castle was introduced to the outside world by the writer Lafcadio Hearn (1850-1904), who described it in his *Glimpses of Unfamiliar Japan* as 'a vast and sinister shape, all iron-grey, rising against the sky from a cyclopean foundation of stone. Fantastically grim the thing is, and grotesquely complex in detail.' Visitors today regard the charming Matsue as grim only in its existence as a 'black castle', with its walls covered in black-painted planks. It is one of Japan's best-preserved sites with an original keep, and was completed after five years' work by the *daimyo* Horio Yasuharu.

Matsumoto

Formerly known as Fukashi, Matsumoto castle boasts Japan's oldest surviving tower keep, which is one of the most beautiful buildings in Japan if not in the world. Its location in the heart of the 'Japanese Alps' spared it from bombing during World War II, and its setting is near perfect. Unlike most castles built on a hill, Matsumoto is a *hirajiro* - a castle on the plain, except that the immediate plain is beside the wide river that forms its moat. The moat is crossed by an exquisite bridge in Japanese style, which complements the graceful design of the keep. The hipped roofs are so designed to ease the burden of winter snow. With no subsidiary towers, walls and trees to detract from its impact, Matsumoto is visually the Taj Mahal of Japan.

A fortress was first constructed on the site in 1504, and played its part in the expansion of the Takeda clan. It is to Ishikawa Kazumasa, however, that we owe the present magnificent castle. The complex we see today consists of the keep, an attached northern tower which balances it perfectly, and a small moon-viewing tower, and dates from 1593, with the present keep being finished in 1597. Both in its external appearance and its perfectly preserved interior Matsumoto ranks with Himeji as Japan's finest castle, and in my opinion outshines it because of its superior setting.

The *Ni no maru* palace of Nijo castle in Kyoto, the seat of the *shogun* in the old capital.



Matsuyama

Matsuyama (otherwise Iyo-Matsuyama to distinguish it from the one in old Bitchu province) was built by Kato Yoshiaki in 1601. The black walls and almost straight gables and roofs are quite striking.

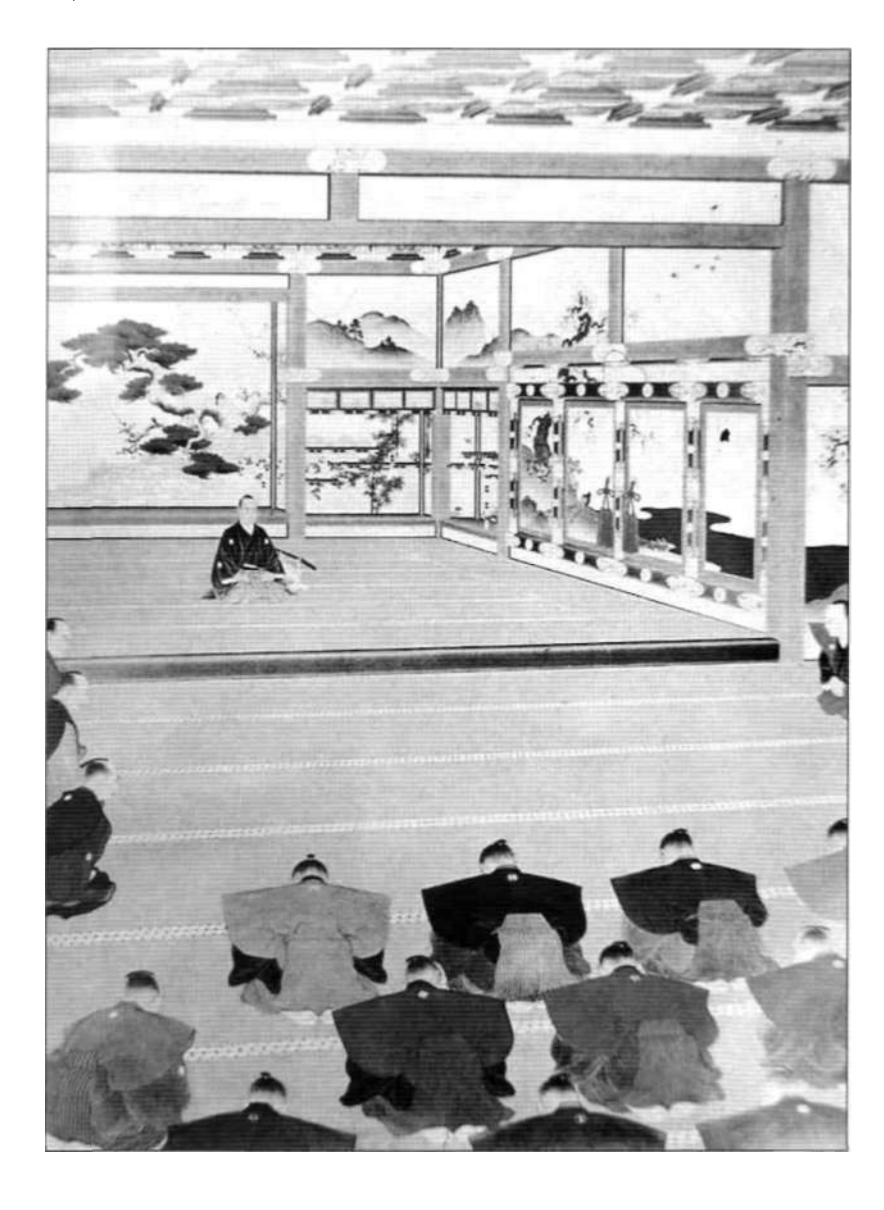
Nagoya

Nagoya castle, located in the heart of one of Japan's largest cities, was something of a latecomer onto the castle scene, being built in 1612 for Tokugawa Ieyasu's ninth son, Tokugawa Yoshinao, who was appointed lord of Owari province. The successive *daimyo* of Owari were the heads of one of the three most important branches of the Tokugawa family. Nagoya castle reflected this importance, and rivalled Osaka in its appearance. Unfortunately it was almost totally destroyed in World War II, and the existing keep is a concrete reproduction.

Nijo

Nijo castle, which lies within the city of Kyoto, is unique among Japanese castles in that the keep has disappeared while the ornate palace has survived. It was originally built in 1603 to be the official Kyoto residence of the first Tokugawa *shogiin* Ieyasu, whose capital was Edo (now Tokyo). Nijo was completed by the third *shogun* of the line, Tokugawa Iemitsu, who transferred some structures from Fushimi castle. As a result, Nijo is representative of some of the best architecture and interior decoration of the Momoyama Period. Only the base of the keep (burned after being struck by lightning in 1750) survives in the *hon maru,* but there is also a small palace that dates from 1847. The focus of attention at Nijo, however, is found in the *ni no maru,* where the palace of the same name covers an area of 800 *tatami* (straw mats) and has 33 rooms. It was completed in 1626 and is almost entirely constructed from hinoki cypress, with wall and screen paintings by artists of the Kano school.

The palace consists of five interlocked complexes. On passing through (or beside) the Willow room, Retainers' room, Reception room and Third Grand Chamber the visitor arrives at the First and Second Grand Chambers, which are of important historical significance, because it was here that the 15th and last Tokugawa *shogun* abdicated in 1867. Beyond this lies the Inner Audience Chamber, where the fudai *daimyo* were granted audience. These were the hereditary retainers who had supported the Tokugawa at the battle of Sekigahara in 1600. The tozama *daimyo,* who had opposed him, never got further than the Third Grand Chamber. The innermost rooms were the *shogun's* living quarters, where he could sleep soundly in the knowledge that the slightest movement



The First and Second Grand Chambers of Nijo castle are of important historical significance, because it was here that the 15th and last Tokugawa *shogun* abdicated in 1867. That occasion is depicted here.

along the corridors by an assassin would be transmitted to the guards by the squeaking of the *uguisu bari*, the nightingale floor. The squeak was produced by metal clamps under the floorboards rubbing against the nails.

Odawara

Odawara was the great castle of the powerful Hojo family, besieged in 1590 by Toyotomi Hideyoshi. The present castle keep is a rather disappointing modern concrete reproduction.

Okayama

Okayama lies on the banks of the Asahi River, and is one of Japan's best known 'black castles', although the fine keep is in fact a concrete reconstruction after the original was destroyed in an air raid in 1945. Ukita Hideie, the *daimyo* who became commander-in-chief during the Korean campaign, first raised it in 1597. Its base is an irregular pentagon and the keep itself is six storeys high. The original castle complex had an additional 34 towers and 21 gates, which was a large number for the time.

Osaka

Osaka castle is one of the most important fortresses in Japanese history. Toyotomi Hideyoshi built it in 1586 on the site of Ishiyama Honganji, the formidable fortress cathedral of the Ikko-ikki. In 1614/15 it suffered perhaps the greatest siege ever seen in Japan. Much of it was burned at this time, but Osaka was rebuilt shortly afterwards, only to suffer more destruction at the end of the 19th century. Today a rebuilt keep, housing a magnificent museum, is the centrepiece of a vast complex of interlocking stone walls and moats at the heart of the city of Osaka.

Ueda

Ueda lies on the old Nakasendo road, and was the site of the celebrated delaying siege by Tokugawa Hidetada, which kept him away from Sekighara in 1600. Two corner towers and the walls remain, which are enough to justify a visit, and there is a very good museum.

Wakayama

Wakayama castle was built on the site of Ota castle, captured by Toyotomi Hideyoshi in 1585 after a daring operation involving flooding. It lies at the mouth of the Kii River, and owes its present appearance to Tokugawa Yorinobu, the 10th son of the first Tokugawa *shogun*. Unfortunately, the original keep was destroyed in 1945, but it has since been reconstructed very well.

Japanese castles in Korea

The *wajo* sites in Korea are little known and rarely visited, but give a remarkable insight into the style of stone-clad castle with little in the way of superstructure or later embellishments. The best sites are Sosaengp'o, with a fine stone base, Sunch'on, where a long hog's back of a hill has been utilised, and Ulsan, site of the famous siege.

Bibliography and further reading

There is of course a sizeable literature in Japanese on Japanese castles, but the following list covers only works in English.

There is a handy little volume in the Hoikusha Color Book series entitled *Japanese Castles.* The author is Michio Fujioka. It was first published in 1968, and replaces the earlier *Castles in Japan* by N. Orui (Tourist Library Volume 9, 1935). The best monograph of the subject is *Feudal Architecture of Japan* by Kiyoshi Hirai (Heibonsha Survey of Japanese Art Vol. 13, 1973).

For the siege weapons used against Japanese castles see my books New Vanguard 43: *Siege Weapons of the Far East (1) AD 612-1300* (Osprey, Oxford, 2001) and New Vanguard 44: *Siege Weapons of the Far East (2) AD 960-1644* (Osprey, Oxford, 2002). The wider military background to Japanese castle warfare may be accessed through my previously published works such as *Samurai Warfare* (Cassell, London, 1996); *The Samurai Sourcebook* (Cassell, London, 1998); Campaign 69: *Nagashino* (Osprey, Oxford, 2000), which describes the famous siege of 1575 in great detail; Warrior 29: *Ashigaru 1467-1649* (Osprey, Oxford, 2001); and *Samurai Invasion: Japan's Korean War 1592-1598* (Cassell, London, 2001), the first full account of this important campaign, including the only details in English of the *wajo.* A monthly update of my work may be found on the internet at www.stephenturnbull.com.

The best guidebook to Japan for anyone who wants to visit the castles mentioned here is *Gateway to Japan* by June Kinoshita and Nicholas Palevsky (Third Edition - Kodansha, 1998). For a spectacular scene involving the siege of a Japanese castle of the developed form, see the movie *Ran* (1985), directed by Akira Kurosawa. For a *sengoku yamashiro,* see Kurosawa's older production *Throne of Blood* (1957).

Glossary

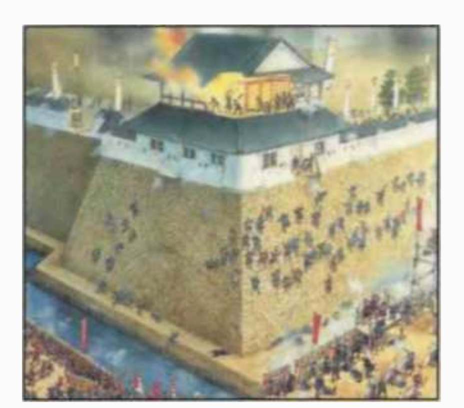
ashigaru Japanese foot soldiers
bakufu The Shogunate, the government of Japan
chidori hafu Curved gables on a roof
daimyo Japanese feudal lord
fujo Castle beside a lake
fusuma paper walls
gohei Paper streamers used in the Shinto religion
han Territory held by a *daimyo*
hashigokaku Style of castle layout having the inner area as the apex
hirajiro Castle built on a plain
hirayamajiro a castle on mountain and plain
honjo Central castle in a *daimyo's* territory
hon maru Inner courtyard of a castle
ishi otoshi Stone-dropping holes, like machicolations
koto mado Style of curved window
kara hafu Triangular gables on a roof
karamete mon Back gate of a castle
ken Length of about six feet
kuruwa Successive courtyards of a Japanese castle
maru Enclosed area within a castle
masugata Defensible space in between two gates
mon (I) Castle gate (2) Family crest
nawabari Literally 'marking with ropes' - castle design
ne ishi Keystone at the base of a castle wall
ni no maru Second bailey of a castle
otemon Front gate of a castle
renkaku Style of castle layout with subsidiary baileys on either side
rinkaku Style of castle layout using concentric circles
samurai Japanese warrior, equivalent to a European knight
son no maru The third bailey of a castle
Sengoku Jidai The'Warring States Period' 1467-1615
sengoku yamashiro Pre-stone style of castles of the Sengoku Period
shachi Ornamental golden 'dolphins' on a castle roof
shijo Satellite castle in a daimyo's territory
sho Liquid measure - about four pints
shogun Military dictator of Japan
shoji Sliding screens of wood and paper
sotoguruwa Outer courts of a castle
somi *yagura* Corner towers
tamon yagura A long tower
tatami Straw floor mats
tenshu kaku Castle keep
wokonomo Alcove
wzumi Secret gate
wajo The name for a Japanese castle in Korea
watari yagura Gatehouse built in the form of a tower
yagura Tower, literally 'arrow store'
yamashiro Castle built on a mountain
yashiki *Daimyo's* mansion

Index

Figures in **bold** refer to illustrations

Fortress • 5

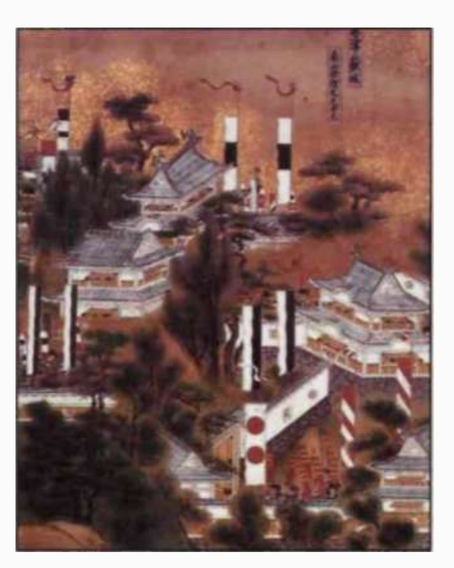
Design, technology and history of key fortresses, strategic positions and defensive systems



Full colour artwork



Cutaway artwork



Illustrations



Unrivalled detail

Japanese Castles 1540-1640

The landscape of 16th- and 17th-century Japan was dominated by the graceful and imposing castles constructed by the powerful *daimyo* of the period. In this, Japan's most turbulent era, these militarily sophisticated structures provided strongholds for the consolidation and control of territory, and inevitably became the focus for many of the great sieges of Japanese history: Nagashino (1575), Kitanosho (1583), Odawara (1590), Fushimi (1600), Osaka (1615) and Hara (1638), the last of the battles that brought an end to a period of intense civil war. This title traces their development, from the earliest timber stockades to the immense structures that dominated the great centres of Osaka and Edo.



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